DOCUMENT RESUME

ED 361 493 CE 064 422

AUTHOR	Janney-Pace, Priscilla; Fox, Laurie
TITLE	Workplace Literacy Tutor Training Manual.
INSTITUTION	Tecumseh Consortium, Springfield, OH.
SPONS AGENCY	Ohio State Dept. of Education, Columbus.
PUB DATE	Aug 93
NOTE	237p.; For a related survey, see CE 064 423. Cover title is "Workplace Literacy Project. Final Report 4-P1-ZM-LC-01."
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF01/PC10 Plus Postage.
DESCRIPTORS	Adult Basic Education; Adult Literacy; Basic Skills; Behavioral Objectives; *Communication Skills; Curriculum Guides; Debate; Decimal Fractions; Group Discussion; Group Dynamics; Instructional Materials; Labor Force Development; Learning Activities; Listening Skills; *Literacy Education; Mathematics Instruction; *Mathematics Skills; Metric System; Percentage; Place Value; *Problem Solving; Reading Comprehension; Speech Skills; Tutoring; Tutors; *Whole Language Approach; Workshops; Writing Skills
IDENTIFIERS	*Workplace Literacy

ABSTRACT

This manual contains a workshop curriculum that offers background information and activities rooted in the whole language approach. It is designed to address needs of employees with skill levels below fifth grade. Section I is an introduction to the changing workplace environment. Sections II-V cover problem solving, communication (speaking skills, listening skills, reading comprehension, writing), discussion and debate, and math (place value, decimals, percentages, metrics). Each section may consist of one or more parts, each of which lists skills to be learned and provides instructions for the workshop trainer, activities or exercises, and reference list. Appendixes contain the following: information on characteristics of adult learners and tutoring in the workplace; extension activities in problem solving, listening and speaking, writing, and discussion and debate; and information on assessment tests and task analysis. Supplementary materials for use in conjunction with the manual are attached. Intended especially for those tutors without whole language training, these sections cover the following topics: the reading process, learning styles, special reader problems, whole language approach, whole language reading and writing strategies, informal measures for selecting suitable reading material, readability formulas, phonic analysis, word families, syllables/compound words/contractions, sight words, tutor "real world" materials, teaching critical thinking, assessment, and goal setting. (YLB)

ED 361 493

TECUMSEH CONSORTIUM

GREENE COUNTY BRANCH

Workplace Literacy Project

Final Report

4-P1-ZM-LC-01

August, 1993

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WORKPLACE LITERACY
TUTOR TRAINING MANUAL

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Tecumseh Consortium, Greene County

This project was supported in part or whole by federal funds of the Job Training Partnership Act (Public Law 97-300, Section 123) and with approval from Ohio's State Education Coordination and Grants Advisory Council.

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ACKNOWLEDGEMENTS

The Tecumseh Consortium gratefully acknowledges the contributions of the following organizations and individuals in the writing and printing of the **Workplace Literacy Training Manual**:

The Greene County Branch of the Tecumseh Consortium staff, for obtaining the grant, and especially Paul C. Brown, County Operations Manager, and Joan S. Pierce, Program Facilitator/Individual Training Counselor, for their continual assistance throughout the project;

The Tecumseh Consortium Administration, especially Ernest Davis, Executive Director; Michael R. Miller, Deputy Director/Financial Director; Toney L. Williams, Special Projects Manager, for their monitoring and assistance of the project;

Mrs. Alexis H. Welsh, Research Assistant to the Workplace Literacy Project, for her on-going administrative assistance and quality research on workplace training programs in Greene County;

Mr. David H. Hillman, Vice President of Human Resources, for his assistance in piloting task analysis, assessment procedures and initiating an employee steering committee for Workplace Training at Antioch Publishing Co;

Members of the Ground Floor Information Committee of Antioch Publishing Co., for their assistance in developing employee involvement in workplace training and marketing strategies, for their guidance in the review of assessment instruments, and for developing a process for implementing a workplace training program...and their humor and patience while getting the project off the ground;

Members of the Workplace Literacy Advisory Committee for their contribution to curriculum content and their review of workplace training in Greene County;

Ms. Penny J. Hawk for proof-reading the workplace literacy curriculum;

Miami Valley Literacy Council (MVLC) for generously sharing their Basic Literacy Tutor Training Workshop Manual, especially Desiree L. Nickell, former Executive Director, and Dee J. Jividan, Executive Director;

The State of Ohio Department of Education, Job Training Partnership Service, for funding the project and especially Karen K. Jesko, Supervisor, for assisting with the guidelines for the project and providing other contacts in the State;

Ms. Lina Verdon for her patience and humor while assisting with the layout and finalized copy of the Workplace Literacy Tutor Training Manual;

and Special Thanks to Ms. Phyllis J. Wisecup, Adult and Community Education Coordinator for the Xenia City Schools, for her assistance and guidance in the development of the math module.

WORKPLACE LITERACY TRAINING WORKSHOP

Welcome to the Workplace Literacy Training Workshop. We hope you find this workshop to be a pleasant and stimulating learning experience. The Workplace Literacy Training Workshop curriculum, funded by the Job Training and Partnership Act (JTPA), offers background information and activities rooted in the Whole Language Approach. The areas addressed are: problem solving, communication skills (speaking, listening, reading, writing) and math (place value, decimals, percent, metric).

Because this is a workplace curriculum, the subjects addressed are approached from a workplace perspective. For example, the writing module addresses the proper format for writing memos, taking telephone messages and writing letters. The reading module includes information on reading and interpreting flow charts.

In order to become completely immersed in the learning process, you will be asked to participate in a variety of activities similar to those you will use with your student. Some of the activities will require working in pairs while other activities offer a small group (3-5) format. Participation in these activities will provide you with first-hand experience related to the kind of learning that will take place and the way the activities are designed to work. After completing this training, you will possess the background information and activities necessary to effectively tutor an adult who desires workplace literacy instruction.

We hope you find the workshop an enjoyable experience. Your interest in learning this new information is gratifying. We further hope that your workplace tutoring experience is a personally rewarding one for you and your student.

SECTION 1. INTRODUCTION

INTRODUCTION

THE CHANGING WORKPLACE ENVIRONMENT

The American Workplace is facing numerous changes during the next ten years. Increased emphasis on productivity, quality, variety, customization, convenience and timeliness will alter management and worker infrastructure (Carnevale, 1991). Workers will approach tasks through teams. Middle manager positions will be significantly reduced, and managers will be delegating much more responsibility to the people doing the jobs. The demand for employees with limited basic skills will be reduced at the same time the labor pool will be shrinking.

A flexible, skilled, trainable workforce is essential to the viability of the American economy. However, there are many constraining problems which reduce the U.S.'s ability to change the workplace and develop the workforce. From 1990 to 2000 the expected population increase will be the smallest since 1950 at 8%; during 1970 to 1980, it was 20%. Approximately 40% of the new workers will be minorities and immigrants. Both of these groups are more likely to be poor and have received inferior educations (National Center on Education and the Economy, 1990). Nationally, about 25% of all high school students drop out. Within minority groups in urban settings, the average drop out rate is 60% (National Center on Education and the Economy). Approximately 25% of the students who graduate cannot read and write at the eighth grade level. As our labor force is shrinking, 25 to 50% of those in the entering labor pool do not have the basic skills to take advantage of necessary training (Van Horn, 1990).

Businesses and services are now encountering difficulties in finding qualified employees. "Companies such as New York Telephone report hiring frustrations of epic proportions--57,000 applicants had to be tested to find 2,100 who were qualified to fill entry level technical jobs" (National Center on Education and the Economy, 1990, p. 23).

Despite the problem with basic skills, companies do not seriously invest in formal training. The little they do invest, about 1-2% of their budget, goes mostly to upper management and to those who already have a college education.

Only a small percentage of training funds go to front line jobs; most of these funds address orientation and additional technical training for the job. Private businesses spend approximately 1% of their training and education

funds on basic skills (Carnevale, 1986). In the education systems, most of the money goes toward students on a college track. There are very limited training systems for those going from high school directly to work.

Countries like Japan and Germany have invested a lot of money and resources in on-going training for people who will have direct line jobs. If front line employees are going to assume more responsibility and plan as members of a team, both the education system and workplace will need to develop better training programs.

The workforce is also aging. In the year 2000, the average worker will be between 35 and 54 years old (Taylor, 1991). These workers will also require an investment in education as the workplace becomes more technical and job requirements become more fluid. The average worker might have 5 or 6 jobs, not just in one company. Many of these workers will require training to make these transitions.

One of the factors that is shaping the new workplace is the decline in U.S. productivity growth since 1973. Our productivity growth rate is slower than the United Kingdom, West Germany, France, and Japan. Although our economy has grown, because more people are working, "weekly earnings have dropped more than 12% since 1969" (National Center on Education and the Economy, 1991). The wealthiest 30% have increased their earnings while the poorest 70% face declining wages. With a slower economy, companies have had to streamline their operations and eliminate much of middle management and jobs that have been replaced by automation. As a result, those people who are working in these companies are expected to take on more responsibility and a variety of new tasks.

In those companies which have been implementing automation and increased technical changes, managers are finding that many workers who were doing satisfactory work cannot keep up with the demands of the new tasks. Since their original jobs were designed to be repetitive and require little critical thinking skills, these employees are now being confronted with different demands. Some companies have tried to compensate by establishing workplaces that are "literacy free," where there are pictures on cash registers instead of words and a set process can be followed after initial job training. Other employers are realizing that they need to invest in at least technical training for their employees so the workers can adjust well to the new machinery and requirements. Other employers are realizing that investment in basic skills training would be prudent since the workers are not able to take advantage of the technical training.

With increased competition from the global market, some companies have recognized the importance of investing in training for their workforce. Screening for vocational training, entry level jobs and job promotions has become common.

Partnership and coordination of training programs have received more emphasis. Unions and businesses are both playing a role in the Job Training Partnership Act. The United Auto Workers and the Ford Motor Company have a collective bargaining agreement whereby both union and management provide funds for training and education skills for displaced and hourly workers.

Literacy Coalitions have received increased funding and support, both nationally and locally. They bring together different segments of the community: business; education; government; labor; human service agencies; media; service organizations and volunteer literacy programs. They help with coordinated planning and referral. Members can, as a group or individual agencies, seek funding through proposals and grants.

Workplace Literacy programs for basic skills are being developed and refined. Basic skills for work include more than reading, writing and math. They include team problem solving, critical thinking, oral communication, motivation, learning how to learn, as well as other skills required for new and changing jobs.

Many companies are putting together interdepartmental teams to work on training requirements; other companies delegate this responsibility to the human resources department or to a top manager. Part of the review of company training requirements can be worker assessment. Companies are testing employees to find out current skill levels and basic skill requirements. Tests for basic skills for workplace literacy require further refinement; a few have been developed for competency levels rather than academic skill levels.

After assessing company or service needs for workplace literacy programs, some employers are setting up programs to address basic skill levels. Some companies have customized programs designed for their training needs. These programs emphasize learning through job related materials or a contextualized framework. Many employers and educators think there is more direct learning when specific job requirements using appropriate terminology and forms are part of the curriculum. Other companies offer GED courses at the work site or at local adult education programs. Company and service organizations address the costs for these programs differently;

some pay for both the time of the employee and the cost of the program; some pay for half of the employee's time and the cost of the training, while others reimburse the total costs of the training or part of the training after the employee has completed the course.

Employees react differently to the opportunities provided by training. If the employees have not been involved in the planning of the training and it is required, they might think the employers are using the training to sift out employees they wish to fire. The employees might think the training is really not relevant to their jobs or their lives. Some employees see the training as a chance for improving their skills and enabling them to apply for promotions in the future. Others might see training as essential to being a successful worker, for whom readiness to learn is critical for changing work environments.

Employees with skill levels below the fifth grade might experience failure in a group setting which is geared for eighth grade skill levels. Most of the programs at companies do not address the requirements of these employees. These employees are not always able to take advantage of existing training programs. They are also the employees who may face difficulties in a changing workforce environment.

The curriculum which has been developed under the State of Ohio Department of Education JTPA 20% of 8% Coordination Subgrants has been designed to address the needs of employees with skill levels below fifth grade. Since most communities already have tutors who have been trained to work with individuals with skill levels below fifth grade, this curriculum orients tutors to workplace literacy requirements and provides generic materials and approaches for tutoring employees at the workplace or alternative sites.

Facilitators using this curriculum to train tutors for the workplace will hopefully adapt the curriculum to more specifically meet the needs of participating businesses. For Greene County where the majority of the businesses have less than 50 employees, the curriculum addresses general business requirements. At the national level, 99% of all businesses have 500 or fewer employees, and two out of every three new jobs will be in new businesses; therefore, a general curriculum might be more appropriate for tutor training.

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SECTION 2. PROBLEM SOLVING

PROBLEM SOLVING

Skills to be Learned

Ability to problem solve
Ability to work as a team member
Ability to be creative
Reassess a concept/situation
See all sides of an issue
Communicate ideas effectively
Listen to others' viewpoints/ideas

Group Process and Problem Solving: They go together very nicely, thank you.

Tell trainees that they are going to engage in a group problem-solving activity which involves change in the workplace. Ask the tutors the following questions as a warm-up to this activity and record their responses on an overhead:

1. What kind of problem solving skills are necessary to participate effectively in a group in order to examine problems, explore the possible solutions, and arrive at viable solutions.

2. Compare their responses to the list on page 12 and add items that are missing.

3. Briefly discuss the meaning of each item on the overhead by first asking the group for their input and then refining their responses or adding information as needed.

Problem Solving Skills

1. **Define the problem.** Simple as it may seem, this step is often overlooked. Take time to get to know your problem on a "first-name basis" by defining it, both in terms of what it is and what it is not. In other words, do not spend time trying to solve the wrong problem.

2. **Brainstorm options for solving the problem.** Just write down possible solutions as they come to your mind. Explore new horizons even though it may feel uncomfortable in the beginning. Do not analyze the list at this point. Many people grab the first idea they like, without exploring all the options. They might arrive at a solution, but it is not the best one. This step also allows people to begin looking at the problem from different points of view; in other words, they might begin to see the problem from a whole new perspective.

3. **Consider all options carefully.** An option may seem unimportant at first glance, but on further examination, it may have merit. Remember "the early bird gets the worm" saying offered by Benjamin Franklin? The worm had the option of sleeping late, but chose to ignore it. Too bad!

4. **Refine options by eliminating some and further exploring others in order to determine if they are truly viable options.** Begin by examining each option from the perspective of positive and negative consequences. List the positive points and the negative points of each option. Consider the financial implications, time factors and personnel involved as part of your exploration. This is a critical step, so take your time. Remember, Humpty Dumpty decided to sit on the wall without exploring the positive and negative consequences and look what happened to him!

5. **Choose a solution to your problem from your list of prospects.** This is a major milestone; congratulate yourself! Now you must plan how you will turn your solution into reality.

6. **Plan how you will implement your decision so the problem will be solved.** Ask yourself, "How will I achieve this goal?" Consider personnel to assist you, time involved and budget, among other things. **Do not be afraid to modify your plan as needed. Be flexible!**

Ask trainees to keep the above problem solving skills in mind as they complete the next activity. Also instruct them to review what kind of skills they must possess in order to fully participate in a group decision-making process (listed at the top of page 11 of this document).

Tell trainees that after the activities are completed, the problem solving skills and group processing skills will be discussed in a large group setting.

Finally, move to the "Presentation" sections and provide the instructions given on the next page.

Presentation: Mind Over Matter (Scannell and Newstrom, 1983)

Ask the trainees to clasp their hands together. Demonstrate to the group. Tell the group to notice which thumb is on top of the other. There are only two choices. Ask them to change the position of the thumbs so that the opposite thumb is on top. Tell them to maintain this position for about ten seconds. Then tell the group to relax and unfold their hands. Finally, ask the questions below:

1. How did you feel when you folded your hands in the usual manner?

2. How did you feel when you folded your hands in a different manner?

3. Why do you believe you felt ill at ease, awkward, etc.?

Lead the group to the concept that because they were trying something new and different, something they were not used to, they experienced the above uncomfortable feelings. Tell them that this is often how workers feel when they are asked to do something new or different on the job. By examining perspectives, as we discussed in problem solving, the fear of new or different situations may be kept to a minimum.

Presentation: Old Woman/Young Woman (Scannell and Newstrom, 1983)

Show the trainees an overhead of the old/young woman drawing by W.E. Hill (**Puck,** November 6, 1915). Ask the group how many see an old woman and how many see a young woman. Ask them why some see one drawing while others see another drawing. After about two minutes of discussion, tell them that individual background and attitudes impact our perception of people, objects and events. Ask these questions for further discussion:

1. What common beliefs or attitudes influence daily activities?

2. What can be done to open our minds to new learning opportunities?

Tell the group that the suggestions offered as answers to question #2 are the same ideas to remember as they tutor the employees.

Presentation: The Brick Factory

Tell trainees that they are going to participate in an exercise similar to one that workers might experience. Inform the class that they are to pretend that they are employees in a brick factory and everything is running smoothly. Then the owner of the factory comes in and informs the workers that a new invention has been developed that will take the place of bricks. In other words, bricks will become obsolete in short order.

The owner says that in order for the factory to stay in business, a new, revolutionary use must be found for bricks, a use that is completely different that will appeal to consumers. The owner also says that in order to inform the public about this new use for bricks as quickly as possible, an effective advertising campaign must be designed, planned and written quickly.

Finally, the owner says that a budget of $50,000 must be developed to determine the cost of production and advertising. The items in the budget will be: materials, prototype costs and advertising campaign. Tell them not to refine the budget due to time limitations.

The owner suggests that in order to make the best use of time, employees should work in teams of 3-5 people so that ideas and responsibilities can be shared. He suggests that everyone start working to solve this problem immediately.

So, working in groups of 3-5, let's not let the owner and the company down. Your task is to develop a new use for bricks, design an advertising campaign and provide a rough draft budget for this project. You have twenty minutes to complete this activity.

We will keep you informed of how much time you have left at five minute intervals. Good luck!

ROUGH DRAFT BUDGET

Cost of material to develop the prototype

Cost of advertising campaign, which could include:

1. Cost of material to use in the campaign
2. Cost of advertising on television and radio
3. Cost of advertising in the newspaper, local and national
4. Cost of advertising in magazines

You will also need to decide if you want to develop the ad campaign yourselves or if you want to hire an advertising agency to do this for you. Remember, your money is very tight! If you decide to develop the campaign yourselves at no cost to the company except your regular salary, this item need not be factored into the budget. Good luck!

Walk around the room and visit each group. Answer questions and clarify instructions as necessary.

After twenty minutes have elapsed, ask a member from each group to share their decisions based on the scenario described above. Then ask the questions below:

Follow-up questions about the Brick Activity: Large Group Discussion

1. What problem solving skills did you use in this activity?
2. What group processing skills did you use in this activity?
3. What went well for your group in this activity?
4. What did not go so well?
5. What would you have done differently?
6. What other skills were used to solve the problem: reading, writing, spelling, listening, speaking, math, explaining ideas, asking questions for clarification, presenting final product to the group?
7. What learning styles did you use?

Other Problem Solving Activities

Tell trainees that there are other simple activities which they can do with their students, as they have already experienced. Inform the group that they are going to do one more problem solving activity which will only take a minute. Finally, provide instructions for the **Count the F's** activity below.

COUNT THE F's (Scannell and Newstrom, 1983)

FEATURE FILMS ARE THE RESULT OF YEARS OF SCIENTIFIC STUDY COMBINED WITH THE EXPERIENCE OF YEARS.

DIRECTIONS FOR THE "COUNT THE F's" ACTIVITY ABOVE:

1. Display overhead of the "Count the F's" activity.

2. Tell the trainees to count the number of "F's" in the selection. Instruct them to work **alone** on this project. No assistance allowed! Tell them that their time limit is 30 seconds.

3. When 30 seconds are up, stop the activity. Ask the group, "How many counted 3 F's?" "How many counted 4 F's?" "How many counted 5 F's?" "How many counted 6 F's?"

4. Do not provide the correct number of F's at this time.

5. Next, ask the trainees to count the F's again, but this time working in small groups of 3-5 people. Again, allow a 30 second time limit.

6. After 30 seconds have elapsed, ask them how many F's there are in the selection, using the same format as in Number 3, above.

7. Provide the correct number of F's, which is 6.

8. Engage the trainees in a large group discussion on the points below.

Ask the trainees which method, working individually or working in a group, yielded the best results. (The majority of trainees will say that working in groups works best.) Next, ask them why working in groups seems to work better (share ideas, spirit of camaraderie, etc.) Provide these ideas if the trainees do not mention them.

Tell trainees the reasons that were mentioned are the same reasons why business and industry want to incorporate team building and team management concepts into the workplace. Owners and managers believe their businesses will be more productive if everyone has a stake in the outcome and if more people are contributing ideas to the problem solving process.

Next, ask the group why everyone did not see 6 F's. Explain that people see what they want to see; items that are more prominent catch our attention, while supposedly less important details are ignored. Remind the trainees that it is important to pay attention to the details as well as more prominent information, especially in problem solving situations. Emphasize to trainees that this concept should be stressed to their students.

Then discuss what kind of skills they used to discover the answers. Ask trainees if they used the same skills that were discussed earlier in the workshop during the "Brick Activity." Ask them how much of a role prior knowledge played in solving these problems. Finally, ask the group how big a role flexibility plays when problem solving.

Stress to tutors that the role of prior knowledge is extremely important and that it may be necessary to provide some pre-teaching material so that students possess the necessary background information required to solve problems and comprehend reading selections.

Inform trainees that there are other problem-solving activities in Appendix D at the end of this book. They are short, simple exercises that will engage adults in creative problem-solving by helping them to become more flexible in their thinking by looking at the situation from more than one point of view. Encourage trainees to use these simple exercises with their students often.

SECTION 3. COMMUNICATION

COMMUNICATION SKILLS NECESSARY FOR THE WORKPLACE: Listening, Speaking, Reading, and Writing

Provide an overhead of the definition of "COMMUNICATION" for the trainees as shown below. Then briefly discuss what the definition means by asking the tutors for their interpretation of the definition. Be sure that the concepts presented in this definition are brought out in the discussion.

> COMMUNICATION is defined by **Webster's II New Riverside University Dictionary** (Houghton Mifflin, 1984) as "the act or process of communicating, the exchange of ideas, messages, or information by speech, signals, or writing." Tell trainees that the end product is the message which is received and interpreted by the intended recipient, accurately or inaccurately, depending on his/her age, experience, and background knowledge. The interpretation is also influenced by the clarity of expression on the part of the speaker or writer. Ambiguous vocabulary can result in misinterpretation and confusion on the part of the message receiver and irritability/embarrassment on the part of the message sender.

Emphasize to trainees that simple, direct communication is usually the best policy. Put the following example on the overhead and ask them to read it silently. Then ask trainees for their input as to how this sentence could be rephrased so that it is easier to understand. Allow three minutes for this activity.

> "Singular specimen of the scientific class of avis contained within the boundaries of the upper prehensile, is equivalently valuable as a doubled inventory of that item located in a low-spreading thicket."
>
> Helen Martin, CUNA Mutual Insurance Group, Madison, Wisconsin.

After three minutes have elapsed, show them the sentence in a more simplified and shorter version on an overhead.

> "A bird in the hand is worth two in the bush."

Re-emphasize to trainees the need to consider the listeners' background experiences, background knowledge and vocabulary when trying to communicate.

Tell trainees that in order to help workers become more effective communicators in the areas of speaking, listening, reading, and writing,

they are going to participate in some activities in the four communication areas mentioned above. Inform them that practice in these areas of communication will provide a more in-depth understanding of skills that are necessary. Tell trainees that communication is not as simple as it may appear. Inform them that they will be able to use activities similar to those done in this workshop with their students.

The writer hopes that the concept of communication has been "clearly communicated" and that the purpose of the activities has been made perfectly clear.

Tell the group that there are communication activities located in Appendix E of this module. Encourage them to use this material as needed.

Tell the group that before they engage in another activity, however, it will be necessary for them to determine their own communication I.Q. by answering the questions as truthfully as possible. Tell them we will discuss the results, the group results, that is, not theirs personally. That would be embarrassing. So, here goes!

Pass out the **Communication I.Q. Test** shown below. Tell trainees that they have three minutes to complete this activity. Remind them of the time at one-minute intervals until the three minutes have elapsed. Then follow the directions immediately after this I.Q. test.

COMMUNICATION I.Q. TEST

Directions: Read each statement below and circle **"Yes"** or **'No"** beside each item which best describes you. Now, be honest!

1.	I ask questions when I do not understand.	Yes	No
2.	To make sure that I understand, I repeat what someone has said, in my own words.	Yes	No
3.	I notice people's facial expressions (happy, angry, surprised, etc.).	Yes	No
4.	I give clear directions.	Yes	No
5.	I listen carefully and speak clearly on the telephone.	Yes	No
6.	My requests are easy to understand.	Yes	No
7.	I give good reasons to explain my opinions.	Yes	No
8.	I respect other people's right to state their opinions.	Yes	No
9.	I respond calmly to criticism.	Yes	No

10. What does the word "communication" mean to you?

11. List the different ways that you communicate at work.

12. List the different ways that you communicate at home.

When three minutes have elapsed, provide the trainees with the following information. Use overheads with the information shown so it can be both seen and heard at the same time. Reveal only one item at a time as you discuss the I.Q. Test results.

After the group has completed the I.Q. Test, tell them that in case they have not already guessed, effective communicators would have circled every answer as "Yes." Asking questions for clarification, verifying that you have received the correct spoken message, being aware of the receiver's emotional state regarding the message, and listening carefully are all part of being a good receiver of communication as well as an attentive and thoughtful giver of messages.

Respecting others' viewpoints, while at the same time offering reasons for your own opinions, suggests someone who is willing to listen with an open mind. It further suggests that because you have reasons for your opinions, you have taken the time to investigate the situation and to reflect on the information gleaned from those investigations in order to arrive at the best decision.

Responding to criticism calmly is probably the most difficult, because it may be perceived as though someone was attacking you personally instead of the act that initiated the criticism. This is an area where communication skills can assist in determining precisely what was meant and what can be done to correct the situation.

Questions 10, 11, and 12 bring to awareness the areas of our lives in which communication is present, intrapersonally, professionally, and

interpersonally, with friends, coworkers, and relatives. Because communication enters into every facet of our lives, it becomes apparent that it is a tool which should be respected and used wisely. The *COMMUNICATION* segment of the workshop will suggest some necessary tools to help us be better communicators. This segment will also offer activities which will enable you to assist other adults to further develop their communication skills. Additional communication activities are offered in Appendix E of this module.

Tell trainees that the first area of communication to be addressed will be SPEAKING. Tell them that they will begin by exploring some helpful hints to keep in mind for themselves, as well as to share with their learners.

Speaking Skills:

In a large group setting, ask trainees for their input regarding speaking skills by asking them what skills they believe are necessary in order to be a good speaker. Record their responses on a blank overhead. Then show the overhead on "Speaking Skills: Helpful Hints" and briefly discuss each item.

Supply information as needed.

Speaking Skills: Helpful Hints

Use a clear speaking voice. This little hint will help the listeners understand what you are saying without putting forth a great deal of effort. Speaking clearly allows the listeners to concentrate on your message rather than wondering, "Wha'd he say?"

Use correct grammar or "business English" when speaking. Like it or not, we are judged by the grammar we choose. Often, the ideas proposed by speakers who use incorrect English grammar are ignored because they are perceived to be ignorant by the listeners. While this may be unfair to the speakers, it is a fact of life that must be met head-on. Learning and using correct English grammar or "business English" will aid the speakers to get their ideas across to the audience. Their messages are more likely to be heard because the listeners are attending to the message rather than being distracted by the grammar of the speakers.

Choose your words carefully. Use vocabulary that is familiar to members of the audience. This will save confusion and embarrassment on the part of speakers and listeners alike.

Gestures vary with different cultures. Some European cultures are known for gesturing even in everyday conversation. Other cultures seldom use gestures. On an individual basis, some gesture to a minimal degree while others use gestures so frequently they propel themselves into outer space. The more enthusiastic they become about a topic of conversation, the more they gesture.

It is best to become better acquainted with the individual before making presumptions about gestures or the lack of them. You could find yourself propelled into outer space!

Facial expressions also vary from individual to individual. Usually, if the listeners have eye contact with the speaker, they are attending to the message, taking it all in. The facial expressions say, "We are listening to you. We are interested in what you are saying."

Listeners who are looking at their watches, avoiding eye contact with the speaker, rolling their eyes back in their heads, or sitting with their eyes half-open are either bored with the message of the speaker or are not accepting the communication as valid or worth their time. If you receive these messages from your audience, sum up, pack up, and get out with all deliberate speed. Your life could depend on it!

Listen to yourself on a tape recorder. You will discover strange and wonderful things as you listen to yourself. You may be surprised to learn how many times you say, "you know" or "no kidding". These sayings can cause the audience to start counting how many times the speakers utter one of the above sayings, you know. And worse, the intended message drops like a rock!

Listen to how your voice sounds on tape. Listeners develop opinions of speakers and their messages by the way the speakers sound. A high or squeaky voice affects listeners like chalk on a chalk board. It is very irritating. A whining voice creates an aura of complaining about a situation. This turns listeners off very quickly. A voice with no expression or emotion conveys the perception that the message is dull and uninteresting. The listeners begin planning the evening meal or taking a nap. The message is lost forever on this group. Tell trainees that if their students are concerned about their speaking voices, they might suggest that they practice talking into a tape recorder in order to achieve the voice quality they desire. If they are extremely concerned, suggest that tutors investigate whether speech therapy is available at a nominal rate. Speech therapists can prescribe exercises which will allow students to achieve their speaking goals.

Finally, listen to your speaking speed. Speaking too slowly causes listeners to stop listening to the message. Speaking too quickly can cause speakers to jumble words, misuse words and merrily trip over their tongues. Tell trainees to suggest to their students that in order to speak at a rate that is "just right," they should practice speaking into a tape recorder until they have achieved a speaking rate that feels comfortable to them and, at the same, holds the attention of the listeners.

Listening Skills: Effective Listening Techniques

Before providing the tutors with the effective listening techniques shown below, ask them to brainstorm a list of effective techniques. Record their suggestions on an overhead projector or a flip chart. Allow two to three minutes for this activity. Fill in points from the list below as well as a brief explanation of each, as needed.

Look at and listen to the speaker: Pick up information from body language, gestures, and facial expressions. For example, arms firmly folded across the chest while listening to the speaker tells you that the listener is not only rejecting your message, he is letting it bounce off his tightly folded arms and right back in your face.

Open arms and hands tell the speakers that their messages are being received and carefully considered. These are ideal listeners. They are giving the speakers a chance to make some points.

Sit in the front to eliminate distractions: Sit where it is easy to see the speaker, away from talkative people and other distracting noises. Those little gatherings at the water cooler in the hallway are nice, but they wreak havoc on listening for important information.

Listen for main points: Ask yourself, "What do I need to know in order to understand this topic/subject?" "What are my learning objectives?" Then direct your attention to those main points, full speed ahead!

Listen for details which explain the main points. Some speakers organize information so that discovering supporting details is not a mystery. Other speakers make it into a treasure hunt. Keep asking yourself, "What information do I need that will help me to understand this main point?" When the speaker finally provides the details, write them down immediately, which leads to the next point.

Take notes: Write main points and supporting details which explain the main points immediately. Abbreviate, if possible. Write questions in the margins. Remember, these notes are for you alone. If someone else doesn't not understand them, who cares! But, if you cannot understand, you are in big trouble.

Redo notes within 20 minutes, if possible: This action helps to solidify the information in your head by connecting it with your prior knowledge of the subject.

Listen for the answers to your questions and record them: This written record will help to recall important information later.

Anticipate what the speaker will say next: This will help to focus attention on the content of the speech or lecture. Predict what will be said and listen to discover if you are on target. Be flexible about predictions. Remember, weather specialists change their predictions with great regularity.

Be aware that listening to a presentation on a topic which does not interest you is difficult at best. Be aware of this fact and employ the above suggestions in order to glean the most information possible from such a presentation.

Inform trainees that the items mentioned above will help learners to be mentally prepared to attend to a speaker or another person's conversation. Tell the group that these suggestions will help the adult learners to concentrate on important information in any oral presentation.

Tell trainees that they are going to practice the listening skills by attending to the information given on a job-related issue. Inform the group that they will listen to an article and then answer several questions regarding the content. So here goes. Listen up!

Speaking/Listening: Part One

JOB SECURITY ARTICLE

Women React to Factory Closing
Taken from **News for You, January 20, 1993 edition.**
Published by New Readers Press, Syracuse, N.Y.

The General Motors (GM) factory, Willow Run, Michigan, will close down forever this year. About 4,000 people work there. More than 600 of them are women.

Most of the women will lose their jobs. Women weren't allowed to work at the factory until 1968, 12 years after it opened. As the last ones hired, they will be the first to be let go.

The factory closing is a real blow to many of these women. A large number of them are single mothers. The high-paying jobs allowed them to provide well for their families. Now their futures are uncertain.

Women have fought hard to be accepted by the men at GM. They have worked as carpenters, welders, and machine operators. "We had to prove we weren't sissies," said Betty Haywood.

Some women will be transferred to GM plants in other states. Velinda Asam might get a job in another state, but she will need help finding child care for her daughter, Sara.

"I'm afraid I'll end up on welfare," Asam said. "What scares me the most is losing my independence."

"I'll work two jobs if I have to," said Julie Allera, who has two children.

Bob Harlow is president of Willow Run's United Auto Workers Union. He praised the women's responses. "The women seem to be handling the closing much better than the men," he said. "It's easier for them to talk about it. The men think they have to be macho."

The women aren't just talking about the closing. Some of them are taking action.

"I'm not going to just walk out of here without fighting," Kelly Arter said. She became active in union protests. She also took a Dale Carnegie course, in which she won a leadership award.

Monica Kenny went back to school for a master's degree. "When the plant closes, I'm going to be prepared," she said.

Questions for the Job Issue Article:

1. What job issue was discussed?
2. Tell two points about the issue that were covered.
3. Is there any other information you wish to report?
4. Is there other information you need in order to be more knowledgeable in this area that was not provided in this article?
5. How would this information affect an employer?
6. How would this information affect you personally?

Inform trainees that they can use questions similar to these when working with their students. Tell the group that articles on work-related topics are found in Appendix E of this module.

Tell trainees that workers are asked to perform job tasks everyday by listening to instructions or following written directions. The job of writing instructions or giving instructions orally is more complicated than it may appear. Following written or oral directions is also more difficult than one would believe at first glance.

Tell the group that to illustrate these points, they are going to complete the exercise below. Inform the group that after the activity is completed, we will discuss what they learned.

EXERCISE

1. ***In groups of 3-5, instruct trainees to write the directions for how to prepare a peanut butter sandwich.***

2. ***Have the first group read the directions for preparation aloud, while the second group prepares the peanut butter sandwich, following the directions.***

3. ***The second group of trainees will prepare the peanut butter sandwich by listening to and following the directions of the first group.***

4. ***Finally, discuss the questions below.***

After the exercise is completed (10 minutes) discuss these questions in a large group:

A. What did you learn about creating clear communication from this exercise?

B. How could you have communicated your directions more clearly?

C. What did you learn about listening to directions?

D. How could you have been a more effective listener?

Finally, tell the trainees that thoughtful communication through listening, speaking, reading and writing is necessary if workers are to function efficiently and effectively on the job. Indeed, effective communication is necessary in all facets of our lives.

Reading Comprehension

Show an overhead of the three paragraphs below and allow time for them to read it, about two minutes. Then facilitate a discussion to help trainees understand that reading comprehension and meaningful learning are partners in the learning process. They should be inseparable.

Inform trainees that the two methods described below allow reading comprehension and meaningful learning to occur. Tell the group that we will learn and practice each method. The first method, Guided Silent Reading, was introduced in the basic tutor training workshop. The second, Cognitive Mapping, is new information for this workshop.

Reading comprehension is often linked to whether or not readers can recall facts accurately from the selection. Too often, seeking meaning from the printed page is ignored. The goal of reading comprehension should be one of meaningful learning. Meaningful learning, according to David Ausubel (1968), is when new information is linked with relevant ideas that already exist in the minds of the students. To further explain, readers have an idea (concept) in their minds. They learn new, relevant information by reading new material. This new information modifies or changes the original idea in their minds.

For a period of time the old knowledge can be recalled in its original form, but as time goes by, the original knowledge and the new knowledge blend together into a new, more meaningful idea.

This theory of knowledge exemplifies the need to determine the students' prior knowledge on a topic and provide background information if necessary. The students' background knowledge should always be considered when teaching reading or any other subject. The Guided Silent Reading method, which was learned in the basic tutor training workshop, is a method which uses the students' prior knowledge as a starting point of the lesson. It is briefly reviewed below.

Remember the ***Guided Silent Reading*** method that was introduced in the basic tutor training class. It involved the **prereading** activities, when the tutors and students discussed prior knowledge of the subject and reviewed past experiences. Predictions were made regarding the author's message about the subject. The **during reading** segment involved the students reading a predetermined section of the selection, then confirming or changing their predictions as needed. New predictions were made, and the process continued until the selection

was completed. The **post reading** activities varied, depending on the learners' needs and goals. Reading other material on the topic, writing letters for information or to express an opinion, writing different endings to the selection, or writing personal reactions to the selection were some suggested post reading activities.

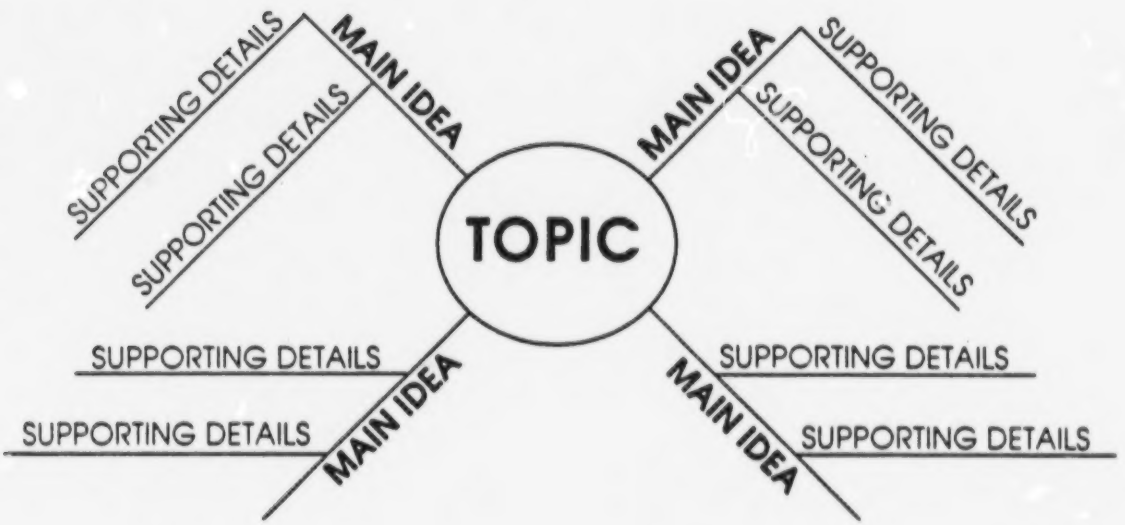
The second learning strategy is **Cognitive Mapping**. Cognitive mapping is another learning method that helps students organize information in graphic or visual form. Cognitive mapping is outlining in a visual format and depicts the interrelationships of concepts presented in print material such as newspaper stories, fiction and non-fiction material and training manuals. In fact, mapping is widely used in technical manuals in the form of those ever popular flow charts. Ideally, if one can follow the flow chart, one will discover how "the darn thing works."

Mapping is useful as a reading comprehension and writing tool because it helps the learners visualize the interrelationships of main ideas to topics and details to main ideas. Mapping also assists learners to realize that main ideas need explanation and that supporting details serve that purpose. (See Non-fiction and Fiction example maps.)

Operations manuals use mapping in the form of flowcharts and category charts as shown in the examples from the **Speed Queen Repair Manual, (1964).** Line supervisors and workers are often required to read and interpret material similar to these examples. Encourage trainees to engage in exercises similar to the **Speed Queen** example with their students when appropriate.

Provide examples of maps for tutors to use with their students, such as those shown in this module.

NON-FICTION -


TOPIC
MAIN IDEA
SUPPORTING DETAILS
SUPPORTING DETAILS
MAIN IDEA
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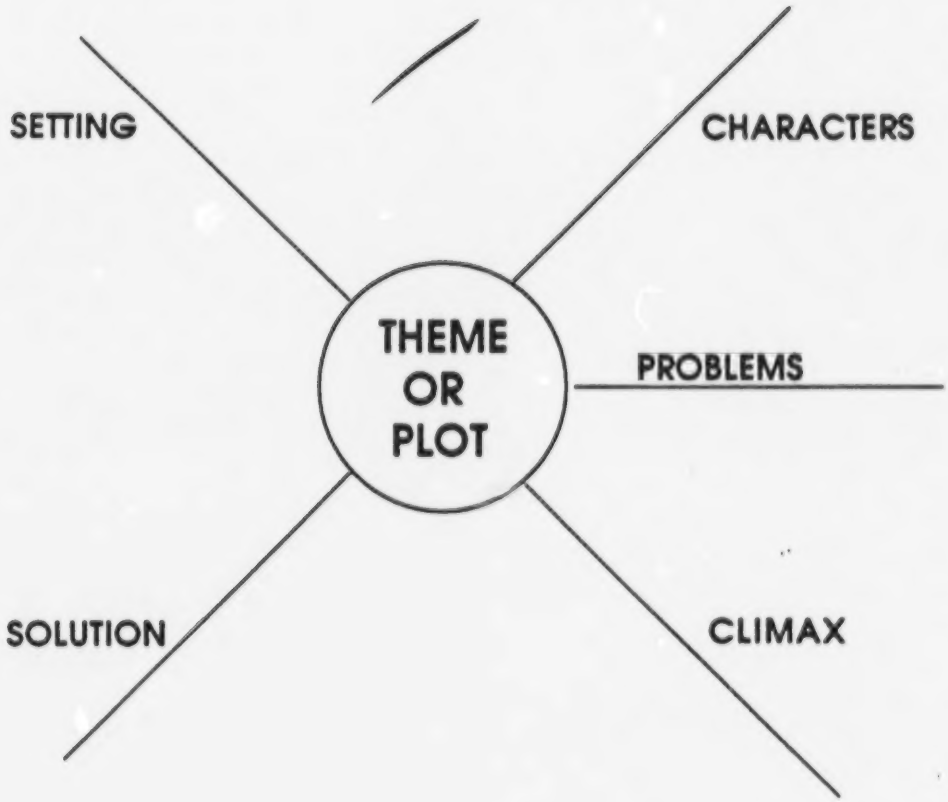
FICTION



MAPPING

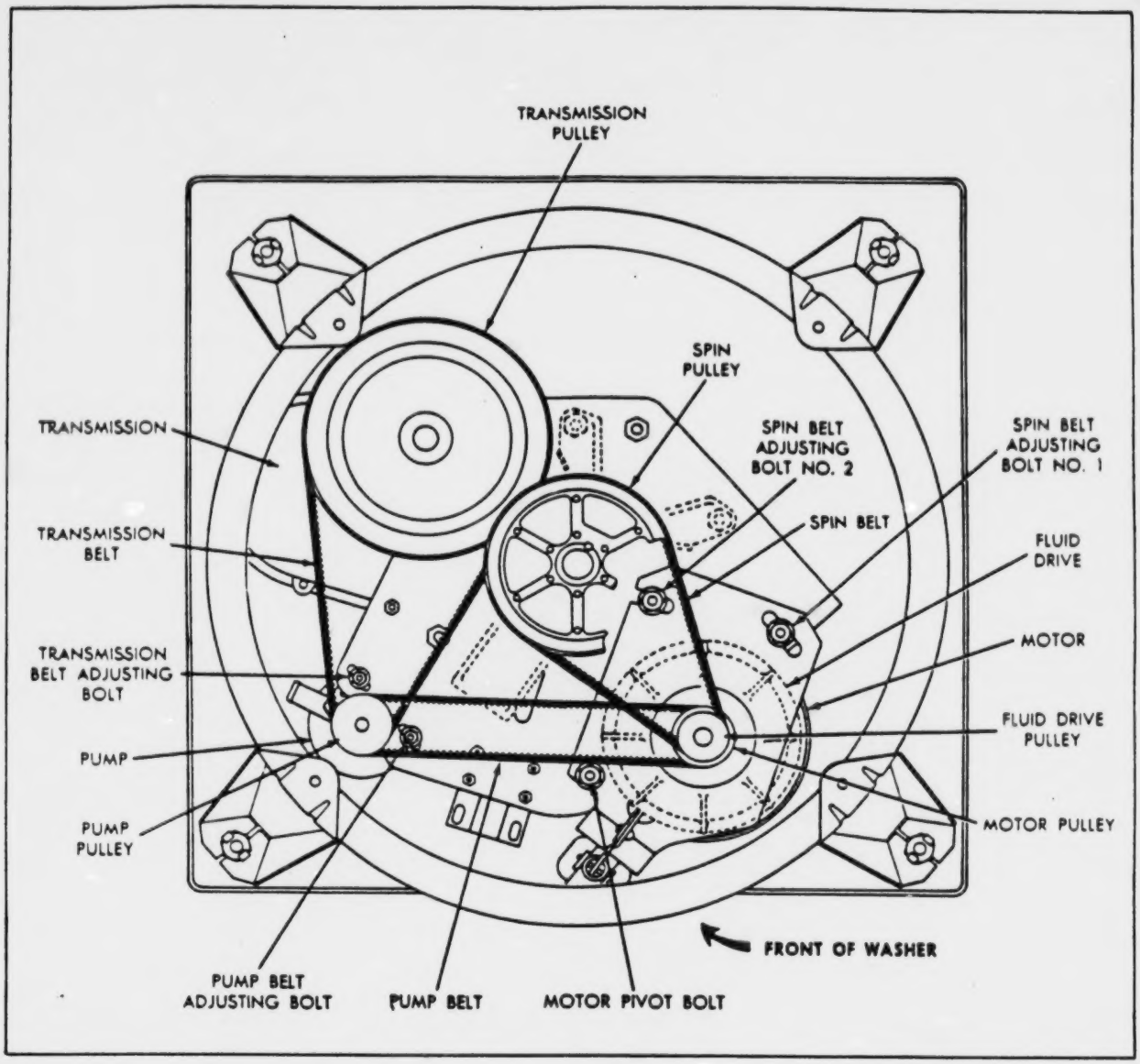


Figure 82

59. CENTERING SPRINGS

a. Remove rear panel (paragraph 24).

b. Remove right side panel (paragraph 26).

c. Disconnect snubber springs from snubber and from frame ring (Figure 83).

d. Open loading door.

e. Note position of agitator hold-down cap within loading door opening. If hold-down cap is not centered within the loading door opening, loosen lock nut on appropriate eye bolt (See Figure 83) and turn adjusting nut to compensate.

f. After hold-down cap has been centered within the loading door opening, retighten lock nut(s) securely.

SERVICE HELPS

SECTION V

SYMPTOMS	CAUSES	REFERENCE AIDS
71. NO HOT WATER	Hot water faucet not open.	
	Water in hot water tank cold.	
	Kinked hot water inlet hose.	
	Clogged mixing valve screen.	Remove and clean or replace.
	Inoperative hot water solenoid.	Paragraph 64.
	Faulty hot water contact points in timer.	Step "e", paragraph 61.
	Break or short in hot water solenoid circuit.	Wiring diagram, Figure 102 or 103.
	Incorrect wiring.	Wiring diagram, Figure 102 or 103.
72. NO COLD WATER	Cold water faucet not open.	
	Kinked cold water inlet hose.	
	Clogged mixing valve screen.	Remove and clean or replace.
	Inoperative cold water solenoid.	Paragraph 64.
	Faulty cold water contact points in timer.	Step "f", paragraph 61.
	Break or short in cold water solenoid circuit.	Wiring diagram, Figure 102 or 103.
	Incorrect wiring.	Wiring diagram, Figure 102 or 103.
73. NO WARM WATER	Faulty temperature control switch.	Paragraph 62.
	Break or short in temperature control switch circuit.	Wiring diagram, Figure 102 or 103.
	No cold water.	Paragraph 72.
	No hot water.	Paragraph 71.
	Incorrect wiring.	Wiring diagram, Figure 102 or 103.
74. WATER DOES NOT SHUT OFF	Sediment on or under mixing valve diaphragm or between armature needle and seat.	Figure 30.
	Broken or weak armature spring.	Figure 30.
	Faulty hot or cold water contact points in timer.	Steps "e" and "f", paragraph 61.

SERVICE HELPS (CONTINUED)

SYMPTOMS	CAUSES	REFERENCE AIDS
75. TUB DOES NOT FILL	Low water pressure.	Minimum required water pressure is 20 psi.
	No cold water.	Paragraph 72.
	No hot water.	Paragraph 71.
76. TUB DOES NOT SPIN	Inoperative fluid drive solenoid	Paragraph 69.
	Break or short in fluid drive	Wiring diagram, Figure 105.
	Disconnected fluid drive engaging spring.	Figure 84.
	Broken spin belt.	Paragraph 54.
	Faulty spin contact points in timer.	Step "b", paragraph 61.
	Improperly adjusted fluid drive clutch.	Paragraph 60.
	Incorrect wiring.	Wiring diagram, Figure 105.
	Sheared fluid drive cone clutch.	Replace fluid drive (paragraph 46).
	Sheared taper pin in motor drive pulley.	Replace motor pulley and taper pin. See paragraph 44 to remove motor and fluid drive assembly.
	Loose spin pulley.	Figure 82.
77. SPIN SPEED SLOW	Sheared taper pin in motor pulley.	Replace motor pulley and taper pin. See paragraph 44 to remove motor and fluid drive assembly.
	Unbalanced load in tub.	Redistribute load.
	Water not draining from drain tub.	Paragraph 84.
	Improperly adjusted spin belt. Belt adjusted too tight or too loose will reduce spin speed.	Paragraph 58.
	Weak fluid drive engaging spring.	Figure 84.
	Improperly adjusted fluid drive clutch.	Paragraph 60.
	Worn clutch lining in motor pulley.	Replace clutch lining (paragraph 47).
	Loss of fluid from fluid drive.	Replace fluid drive (paragraph 46).

Tell trainees that they are going to practice mapping using a non-fiction article. Tell them to work in small groups of 3-5 people to complete this exercise in 10 minutes. Also tell them that they will be asked several questions about the article after the mapping exercise is completed.

NEWS FOR YOU, New Readers Press, Volume 41, Number 15, April 21, 1993 Edition

Renting to Own Means Paying Double the Price

Let's say you've had trouble paying your bills. You've applied for credit, but you were turned down.

Life without TV is a drag. So you decide to try a rent-to-own store.

The store is filled with gleaming goods. The 25-inch color TV looks great. You can just picture it in your apartment.

The $17.99 weekly payment is appealing, too. It seems so low. Surely you can come up with that amount each week.

Is "rent-to-own" the best way to pay for big purchases? Consumer experts say no.

Buyers will end up paying twice the amount for the product. In the 90 weeks of your TV rental, for example, you'll pay $1,619.10. In a regular store, that same TV will cost $809.55.

So why would anyone buy products this way? Often it's because they have no other choice.

"Our customers are folks who don't have credit or can't get it," says Nancy Johnson. She is spokeswoman for Rent-A-Center. This chain of 1,200 stores is the largest rent-to-own chain in the U.S.

Johnson defends the store's higher prices. "Our business costs are higher," she says. The company repairs items if they break. People can return items at any time.

Rent-to-own stores offer many types of items. These include TVs, furniture, VCRs, major appliances, and even jewelry.

Most people who rent to own are married couples between 25 and 44 years old. One out of five is jobless.

TV's and stereos used to be the biggest rental items. Recently, furniture has been top on the list.

Tips for Renting

If you do rent to own, here is some advice:

* Make sure you know how much the item would cost in a regular store.

* Find out what happens if you miss a payment. Will the item be taken away?

* Ask about repairs or damage. Who takes care of these?

* Learn whether you must insure the item.

Ask the trainees these questions about the **NEWS FOR YOU** *article above.*

1. What was the main idea of the story?
2. What details explain the main idea of the story?
3. Who made statements supporting the main idea presented in the news article? Why?
4. Who made statements against the main idea presented in the news article? Why?
5. In your opinion, what motivated the speakers for or against the ideas presented in this news article?
6. What questions did you want the speakers to answer?
7. Were your questions answered?
8. Were the questions answered to your satisfaction? Why? Why not?

Suggest to trainees that in order to help their students develop improved listening skills, they consider reading news articles to their students and encourage their students to listen to news reports on television and radio. Encourage tutors to discuss these current events with the students, using the questions above as a guide. Encourage tutors to develop their own questions based on the content of the selected news article when appropriate.

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WRITING

Skills to be Learned

Become familiar with different business formats
Use whole language reading and writing processes
Use concise and audience appropriate language

The Business Memo

Background Information

The Business Memo is one of the most frequently used formats for written communication within a company. The memo can inform, persuade and document. A memo should clearly communicate the writer's purpose and be sensitive to the readers' requirements.

Here are some examples when memos can be used: written communication is more effective than oral; many people need to be reached with the same message; regular reports are sent to the same people; people could benefit from a useful summary of information; people need to be motivated to think of new approaches.

Here are some examples of when memos should probably not be used: the writer is extremely angry and wants to criticize a person or people in the company; the timing or political climate is poor; the writer has nothing to say but feels it is time for his or her monthly memo.

The format of a memo usually includes:

Date

To: (receiver, position or department)

From: (sender, position or department)

Subject:

Provide information about the subject with the most important information at the beginning.

Use standard line spacing and paragraph formation in the body of the memo.

WRITING MEMOS

Skills to be Learned

Prewriting
Guided Writing
Editing

Method for writing memos:

1) Have tutors group together in 3's by alternate numbering.

2) Have one person agree to be the recorder.

3) Have each group be responsible for creating a memo addressing tardiness at a workplace. The memo should be no longer than 8 simple sentences since some of the employees have reading skills below the 6th grade level.

Scenario: Recently, the Human Resource Department Manager of a small company of 100 employees has noticed that most people are arriving at work at 7:40 A.M. Work begins at 7:30 A.M., and people are expected to arrive prior to that time. He has verbally mentioned to several employees that they should arrive at work on time, but there has been no subsequent change in their arrival time.

Prewriting

Brainstorm about what you want to say in the memo. What tone of writing do you wish to use? How can you get employees' attention without making them angry? (2 Minutes)

Guided Writing

Use mapping to organize your ideas for the memo. The recorder needs to map ideas to indicate sequence. Mapping: brainstorm ideas by writing concepts in one or two words; refine the process by determining which concepts will be deleted and which will be expanded; further determine which concepts will be the main ideas and which will become supporting details; the main ideas will provide the framework for paragraphs. (3 Minutes)

Writing the Memo

Write the memo in simple sentences following the mapping done in guided writing. Change as you go if necessary. (3 minutes)

Edit

Go over spelling and grammar. Have writers identify words about which they have questions. Have writers identify punctuation they are not certain about. Have another person go over the memo with writers and discuss any necessary changes in spelling or punctuation. Make the corrections. (2 Minutes)

THE TELEPHONE MESSAGE

Skills to be Learned

Listening
Clarification
Writing
Editing
Problem Solving
Audience Sensitivity

Scenario:

A Critical Telephone Message

It is 4:55 PM. The office closes at 5:30 PM. Your boss is at a meeting on the other side of town until 6:00 PM. You are not sure whether or not she will come back to the office before returning home. You have a lot of issues on your mind: Pick up the children at the day care center before 5:40 PM; pick up groceries, cook dinner, get to meeting at 7:30 pm for soccer coaches.
The phone rings.....You are the only person in the office so you answer, but you do not have a pencil and paper.

Jack (answering the telephone) "Yes?"

Caller: "Hello, this is Charlotte Morris; I have a really important message for Jennifer Scratch. May I please speak to her?"

Jack: "I'm sorry; she is gone for the day."

Charlotte: "Oh, please tell her that the meeting with the Commissioners tomorrow morning has been changed to 1 hour earlier, 7:30 A.M., and the location has been changed to their office."

"Thank you for telling her; I am leaving the office right now and can't be reached until the meeting tomorrow."

Jack finds a paper and pencil and leaves the following message on Jennifer's desk.

To: Jennifer

Charlene Forest called and said the meeting tomorrow has been changed. Please call her tomorrow morning at the Commissioners. Good luck finding her. Jack (Oh, I had to leave 15 minutes early to pick up my children at the day care center. Sorry, I forgot to mention it earlier.)

What's wrong with this picture? Has something like this ever happened to you?

Work in groups of 2 and figure out how you would handle this situation.

Write a telephone message in case your boss does return to the office. Use the language experience approach.

Brainstorm and map "What needs to be changed in this picture?" Designate one person to be the recorder.

THE BUSINESS LETTER

The Business Letter is an important communication and marketing tool. It should be concise and convey the critical information. The tone should be appropriate for the topic. Since letters are forms of communication, use the correspondence to talk to your reader. Visualize who your reader is and what tone you would use if you were actually talking to this person.

The first paragraph should contain the most important information. The writing should flow so that one paragraph logically follows another. The tone of the letter should always be courteous. Avoid obsolete flowery language unless you are writing to a fellow flower lover. Be as positive as possible when you are writing.

The following actual letter is an excellent example of extremely brief and clear writing. The tone, however, is not particularly endearing.

Gentlemen:

You have undertaken to cheat me. I won't sue you, for the law is too slow. I'll ruin you.

Yours truly,

Cornelius Vanderbilt

There are many formats for a letter. Find out what format your students' businesses use. Find out if there are several different formats for various departments. Try to use the format that your student will be using or seeing the most.

Standard Format

Most businesses will have their own heading which consists of the name of the company and address.

The date can be two or more lines down from the heading and is usually flush from the left. Occasionally, it might be flush from the right.

When a letter is short and the writer wants to center the body of the letter on the page, additional spacing can be used. However, in general, skip two lines, then write or type the receiver's name, title, business name, address including the zip code. Do not use abbreviations except for the state or lines exceeding the middle of the page. (However, the U.S. Post Office has issued instructions for envelopes, requesting abbreviations be used whenever possible: e.g., South: S. or So.; Street: St. States are two letters in all caps: Maine: ME)

Skip one line and write the salutation, for example, "Dear Ms. Jones:" then skip one line and start your first paragraph. Most business people use colons after the salutation. Others still use a comma after the salutation. The body of the letter can be single or double spaced. You can choose either a block style where everything is flush to the left margin and there are no indentations for single spaced documents, or you can indent first lines of paragraphs and center the closing. When the body of the letter is double spaced, paragraphs should be indented. When the body of the letter is single spaced, double space between paragraphs.

The closing of the letter is two spaces below the last line of the letter. Complementary closes can be flush left or at the center of the page; they are followed by a comma; the first letter is capitalized. Skip three spaces and then write or type your name and title. Sign your name in the blank spaces.

Some examples of complementary closes are:

Sincerely yours,
Very truly yours,
Respectfully yours,
Yours cordially,.

The following is an example of a block styled letter.

Monroe & Miller Company
1735 Clayton Drive
Cranesville, Alaska 12345

April 4, 1995

Mr. John Pecuniary
114 Rigid Drive
Morgantown, Montana 23456

Dear Mr. Pecuniary:

We received your letter of March 19, 1995. We are pleased to hear that you have found the book, Don't Spend an Extra Dime, helpful. We would like to be helpful concerning the $.20 postage which you have requested to be refunded to you.

Unfortunately, our catalog clearly states that all postage is to be paid by the recipient of our merchandise. We would appreciate a check for $.20 since your account with us is now overdue.

Respectfully yours,

Colin Obsolete

The following is an example of another style of letter:

Morton & Johnson Inc.
1257 Jerry Road
Sparta, Indiana 23678

June 6, 1994

Ms. Juanita Paxton
Director of Shipping
Westerville Publishing Company
Forest, New Jersey 62913

Dear Ms. Paxton,

We are in receipt of your letter, dated May 19, 1994, concerning your interest in our new self-sealing boxes. Unfortunately, these boxes will not be available until July 20, 1994.

Please let us know if you are still interested in ordering 2,000 boxes, size 10, for July. We appreciate your enthusiasm about our latest product.

Yours sincerely,

Roger Q. Smith
Marketing Manager

Writing a Business Letter

Skills to be Learned

Following a specific format
Writing a concise letter
Use duet reading

Work in groups of three to five people and write a letter requesting replacement of a product that was defective. Keep the letter brief, no more than 8 short sentences. Then edit the letter to ensure that you have followed an appropriate business letter format and used proper grammar and spelling. Read the letter using duet reading.

Business Reports

Businesses use reports for many purposes. Some examples are: investigating problems, updates on new products, marketing analysis of customer complaints and reports on inventory. Large business organizations are more likely than small businesses to use reports. However, with increased computerization of departments, reports will become more common in small businesses. The person(s) you are tutoring might need to write a report requested by their supervisor(s). Reports vary according to subject matter, department and audience. Therefore, providing a generic example is extremely difficult. Even the definition of "report" is disputed. Some people would say that reports are any presentation of data or information while others would say that reports include only the very formal presentation of information. Raymond Lasikar in Basic Business Communication defines a business report "as an orderly and objective communication of factual information that serves some business purpose." (p.320)

If your students need to write reports, find out the purpose of the report, who has requested it and what information it should contain. Then help your students organize the outline for the report. Each report is customized unless there is a standard report format for the company. If there is a standard format, obtain a sample of a report and help your students with the writing of the report.

Reports can also be used for reading, comprehension, grammar, spelling and key vocabulary words.

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SECTION 4. DISCUSSION AND DEBATE

DISCUSSION AND DEBATE

Changes in the Workplace: Discussion and Debate: Can the United States continue to be an economic superpower?

Skills to be Learned

Ability to group problem solve

Ability to compare and contrast

Ability to organize a brief presentation

Ability to present a point of view

Ability to "hear" different points of view

Ability to use language experience approach to support group discussion

To Debate is "to discuss opposing reasons; argue," as defined in Webster's New World Dictionary, Third Edition, 1988. Debating can provide an excellent process for honing oral presentation skills, using critical thinking skills, and practicing language experience approaches.

In small groups of three to five people, trainees are going to briefly debate two different options of the National Issues Forums, "Regaining the Competitive Edge" (1990). (Trainees have bought and have been requested to read "Regaining the Competitive Edge," Abridged Edition, prior to participating in this training module. One person per group has volunteered to be the facilitator.)

Request trainees to read the brief summary of the Introduction and Options 1 & 2 prior to the training session.

The workshop trainers model discussion and debate. They use National Issues Forum, "The Health Care Crisis," Moderator Guide as a brief outline of the topic. They model the process for personal issues, vocabulary development, strengths and weaknesses of arguments, useful quotes, and finally, presentation of the options.

Request trainees to review brief summary and Options 1 & 2 of "Regaining the Competitive Edge".

"INTRODUCTION: THE KEY IS PRODUCTIVITY"

"America's growth in productivity has been slowing down. We have to become more productive to compete with other countries. We have to be more productive to give our children better lives. How can we improve productivity in the 1990's?" (VanHorn (ed.), 1990, p. 4)

Productivity is defined as "how much and how efficiently things are made". Productivity growth means that each worker can produce more each year. It means that the number of hamburgers a worker can serve goes up. It means that the number of bushels of wheat a farmer can grow goes up. When productivity growth slows down, it affects all of us (in terms of our standard of living and our future.)

Between 1947 and 1973, our productivity increased significantly; 2.7% per year. It doubled in about 30 years. For 25 years after World War II, America had the fastest-growing economy in the world.

Productivity started slowing down in 1973 with the increase of the price of oil. Since oil was used to run most machines, the use of machines decreased which affected productivity. After the oil crisis, world-wide productivity increased but not in the United States. From 1973 to 1988, productivity in the U . S . has been growing at the average yearly rate of .6% while Japan's yearly average has been 2.9%, France' s 2.2% and West Germany's 2.1%. (p.5)

Other areas where we are slipping are: standard of living, education, environment and national debt. With declining productivity growth, "it is harder for us to solve these other problems." We no longer can promise that "our children will be better off than we are. " (p. 7)

What should we do to address the problem of lower productivity? The following two choices provide specific viewpoints on the causes of the problem and suggestions for better use of our human resources.

CHOICE #1
MOTIVATING THE WORK FORCE

"American workers and managers do not care about quality anymore. They are not performing as well as they used to. This is why other countries are doing better than we are. We must give people incentives to do a good job." (VanHorn (ed.), 1990, p. 9)

People who support choice #1 believe that Americans no longer care about quality. Most companies in the United States have not paid much attention to quality control until recently. Most companies still do not focus on quality while the product is being made. However, customers are indicating that quality is very important.

Many people have been doing just a mediocre job at work, "enough to get by and keep a job". Businesses need to reward employees who do well and take responsibility. Some people see middle managers as interfering with that process and think that their positions should be eliminated. Employees who work hard should be rewarded. "Productivity has increased where such rewards are offered." (p. 10)

Our schools need to improve. Japanese students are much better at math than American students. Japanese students go to school eight more weeks per year than American students. Our students and our teachers are not rewarded for doing a good job, nor are they penalized for doing poorly. Students are not working as hard as they used to both in high school and in college. Good teachers, according to Choice 1, should be paid more. The school year should be increased.

<u>Counter-Arguments</u>

" Workers and managers will not work harder than they have to. We would have to make big changes in the workplace. Basing workers' pay on performance would cause problems." Money alone will not solve the school problems. "We must make sure that we are teaching students what they need to know." (p.13)

CHOICE #2
EXPANDING THE WORKFORCE

"Millions of people do not have the basic skills they need to get jobs. This is not good for the nation. It slows down economic growth. We must make sure all workers have the basic skills they need to work productively." (VanHorn (ed.), 1990, p. 14)

Many people do not have the basic skills for today's jobs; they have dropped out of high school and can not read above the fifth grade level, write fluently or do simple computations. Minority groups have higher illiteracy rates and are more likely to drop out of high school. Companies need people with basic skills who can be trained.

Approximately, "one third of American adults can only do unskilled work." (p.15) These workers are part of the cause of our productivity problem. Many companies are hiring workers who then need to be trained in basic skills. Countries like Japan, England, and West Germany do not have this problem or the ensuing costs. Many people with low basic skills are unemployed. Each unemployed person costs our government $25,000 per year.

Our schools do not focus on the average student. We pay more attention to the student going to college. "Very few people receive government-supported training." "Federal and State governments only spend about $20.00 per year on education and training for each American adult who does not have a high school diploma." (P. 16)

For Choice #2," we must spend more money and devote more resources to those who lack basic skills." There are six areas which need support. There needs to be more emphasis on early childhood development and health programs such as Head Start. When schools are failing, the state and local communities need to step in. Students need motivation and rewards to stay in school. School drop-outs need encouragement to drop back in. Schools and businesses need to bridge the gap from school to work. Communities need to provide extensive literacy training."(pps. 16 -17)

<u>Counter-Arguments</u>

Different perspectives include: basic skills are not the key problem; government should not interfere with business and education; these programs cost too much money; we need to concentrate on high-level skills (p.18).

The workshop facilitators will briefly model the process for discussion and debate using the National Issues Forums, "The Health Care Crisis," Abridged Edition, 1992.

After the modeling and critique, request trainers to sit with their preassigned group. Have the trainers establish the ground rules for discussion. Each group needs to develop their own ground rules which might include: each person should have equal opportunity to speak (e.g. no long-winded talkers); listen to each person's point of view and try as hard as possible to respect that person's right to a point of view; the facilitator can move the discussion along if the group gets stuck; no personal attacks; if someone wants to pass or not talk, that is their right. Each group should come up with rules that will allow them to comfortably discuss the main problem and the two options.

Once the ground rules are established, ask for two volunteers who will present one of the options to their group. Tell them they will have lots of support. Then ask each person in the group to discuss one way in which they personally relate to this issue. For example, do they have family members who have been laid off as middle managers or due to changing job requirements? Do they worry about their children being able to have a lifestyle comparable to their own? Do they tutor individuals who are having difficulty finding or retaining their jobs? Are they worried that their children are not getting a good education? Each person will probably have many different connections with the topic; have each person limit themselves to their most important one.

The facilitator should ask the group if there are vocabulary words which need further definition or clarification. The facilitator should write them down on flip charts, and the group should have access to a glossary of terms and a dictionary.

The facilitator should ask the groups to discuss the strengths and weaknesses of both options, starting with number 1. Each person who wants should have the opportunity to speak. The facilitator should mark on the flip chart the strengths and weaknesses of each option.

The facilitator can then ask the group if there are any particular quotes, stories or facts that members feel are very helpful in illustrating the strengths of one of the options. Then review the key weaknesses which the group has listed for each option. Ask what facts, stories, or quotes might be particularly useful to counter the weaknesses listed.

The facilitator can then ask the two volunteers if they would like to put their presentation together. Other members of the group can then split up to support each person. The volunteers can use the suggestions as well as their own ideas to present the position in three minutes. Finally, have each volunteer present their option to their group.

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SECTION 5. MATH

MATH AT WORK AND AT HOME

> "Mathematical literacy is essential as a foundation for democracy in a technological age...To cope confidently with the demands of today's society, one must be able to grasp the implication of many mathematical concepts that permeate daily news and routine discussions." (National Research Council, 1989, pp. 7-8.)

Some people had trouble with math in school. Some people thought they were through with math once they left school. Most people have learned that math is a part of our daily lives both at work and at home. As jobs have changed, basic math has become more important. Quality control, production rates, and new technology are all requiring mathematical thinking and problem solving.

Some tutors might remember math as an abstract subject taught in school by their least favorite teacher. However, all of us, including tutors, are far more competent in math than we realize. Math is just another type of language with different symbols and different rules. As with any language, math needs to make sense. Unfortunately, many people have learned math through memorized processes, and they have little idea of what they are actually doing and what the numbers mean.

"Innumeracy, an inability to deal comfortably with the fundamental notions of number and chance, plagues far too many otherwise knowledgeable citizens." (Paulos, Innumeracy, p. 3)

An example of innumeracy comes from the National Assessment of Educational Progress. If a bus holds 30 children, how may busses are needed to take 375 children on a field trip? A frequent response is 12 1/2 busses. Obviously, this response is technically correct, but does not make logical sense.

When adults who have many experiences with numbers feel comfortable with math, they know they use math routinely to quantify (determine how many), identify locations (street numbers, zip codes), order items (first, second, or third), and measure (weight, length, height, volume). These basic skills provide the basis for learning fractions, decimals, percentages, and other numerical systems such as metrics.

There are many approaches to mathematics which help adult students gain confidence in their mathematical skills and thinking. Tutors might find some of them useful, fun and incorporate them into lessons. Investigation poses the question, "What can we find out about....?" It allows students to create their own problems and moves beyond providing the answer to someone else's question. Provide open-ended questions for your students. Ask students questions like, "How did you solve that problem?" "Is this problem similar to other problems you have solved?" "Why/Why not?" Allow students to discuss the processes they use and the conclusions they reach.

Connections within and among areas of mathematics are helpful to adult students. For example, how do addition problems relate to each other in terms of concepts or processes used? Did both problems use 0's to hold place values? How does 25 cents relate to $.25? How does 56 + 56 = 112 relate to 56 x 2 = 112? Connections with every day experiences help students realize how much math they actually know. Manipulatives such as cuisenaire rods, plastic counters, pegs and a pegboard provide concrete experiences for students. Manipulatives allow students to connect abstract symbols such as numbers with actual objects. Lessons with manipulatives need to link concepts with the process being used with the manipulatives...for example, one to one correspondence with counting.

Estimation helps students to understand numbers and spatial relationships. It facilitates students understanding of concepts and procedures and reasonable answers. The value in using estimation is not in finding the correct answer, but in establishing a range of reasonableness for an answer. Scientists often take samples of water to make estimates whether they are measuring fish, pollution, or salt levels.

Measurements provide students with concrete experiences in math. Students encounter fractions in a "real" context. Measurement allows students to use comparative language: more than/less than, bigger/smaller, lighter/heavier. Graphing offers tools for students to collect, organize, and analyze data. Collecting data gives students another opportunity for concrete experiences with numbers. The way the data is collected will effect the graph and how the information is actually seen. The analysis of the graphs will allow students to make comparisons, reach conclusions and form hypotheses.

In this chapter, some of the basic math skills are discussed. Practical examples of using those skills are also provided. Due to the limited time of workshops, the chapter is only focusing on place values, decimals and percentages and the metric system.

Tutors who are working with students in the workplace literacy program will find different levels of skills and interests. Tutors need to discover what their students want and need to learn in order to fulfill job and personal objectives.

Exercise

Number Searches provide people with the opportunity to estimate, round, and generally play with numeracy concepts. In tutoring sessions, the tutors or students can choose the number and develop clues. Ask the tutors to search for and figure out which number has been preselected.

CLUES

1. It is between 50 and 600.
2. It is more than a single-digit number.
3. It is a multiple of 4.
4. It is not a square number.
5. It is an even number.
6. It is evenly divisible by all single-digit numbers except 5 and 7.
7. The sum of the digits is less than 10.
8. It is less than 300.
9. It contains an odd digit.
10. All its digits are prime.
11. The digits are in descending order.
12. It is a factor of 144.

"A firm understanding of place value is a prerequisite for all work in arithmetic. Students who do not understand the concept of place value cannot progress through the four basic operations without difficulty....It is essential that place value be given major emphasis... and that students have frequent experiences with manipulative materials that demonstrate place value." (California Department of Education, 1985, p. 23)

PLACE VALUE

Skills to be Learned

Using numbers greater than nine
10 as the base for our number system
Zero as a place holder
Listening to numbers and writing them down
Writing numbers according to their place value
Writing from words to numerals

Place value describes the math organizational system that is used to express numbers greater than nine. For example, in the number, 567, the seven represents seven ones, the six represents six groups of ten, and the 5 represents 5 groups of 100.

Our number system is based on ten, and it is called a decimal system. (Decimal comes from the Roman word decem, which means ten.) Our system relies on place value to show the absence of any group, ones, tens, hundreds, thousands, etc. There is a large difference between the numbers 52, 502, 5,002, and 500,002.

The place value abacus clearly illustrates how a system uses place for value. The far right column is for ones, followed by the tens, hundreds, thousands, etc. If we calculate the number four hundred ninety-nine, we would have nine beads in the ones column, nine beads in the tens column, and four beads in the hundreds column.

Let's add one to the number 499 on the abacus. You can see how this will change each column. We now have no beads in the 1's, no beads in the 10's, and 5 beads in the 100's.

In our number system, the concept of zero as a place holder or indicator of an empty set is critical for writing numbers. To write the number 600, we write 6 in the hundreds column, then zero in the tens, and zero in the one's. So, the number is written as 600. Without the use of zero's, we would not be sure what the numeral would be or mean.

When we write the numeral for six thousand twenty, we know that we place 6 in the thousands column, 0 in the hundreds, 2 in the tens, and 0 in the ones. If we write it out we know that:

6,020 has 6 thousands, 0 hundreds, 2 tens and 0 ones.

THOUSANDS	1,000	1,000	1,000	1,000	1,000
HUNDREDS	0				
TENS	10	10			
ONES	0				

or

THOUSANDS	HUNDREDS	TENS	ONES
6	0	2	0

There are also non-essential 0's which are used for clarification but not place value. They also facilitate transitions from one mathematical expression to another, like from decimals to percentages. An example is 0.5 or 5.0.

Exercises

The following exercises allow participants to review place value theory.

Tutors can practice in pairs using the cuisenaire rods after the facilitator provides an example using 645.

1. Use your unit, tens, and hundreds rods to express the following numbers:

   53

   29

138

652

1,491

2. Write the following as numerals:

Three thousand forty-six
Seven hundred ninety-five
Six thousand eight

DECIMALS

Skills to be Learned

Place values of decimals
Reading decimals
Writing decimals
Addition of decimals
Subtraction with decimals
Multiplication with decimals
Division with decimals

WHAT ARE DECIMALS?

Decimals are a type of fraction which are arranged by 10's only. Our money system uses decimals but only up to hundredths. We see decimals all the time. We know that $.50 = 50/100 of a dollar which equals 50 cents or 1/2 a dollar. Decimals are also used for daily statistics....for weather, .32 of an inch of rain fell yesterday, ...for sports, his batting average was .453.

Decimals use place values to determine the size of the number. Since decimals do not have bottom numbers, their value is determined by the number of places they take up to the right of the decimal point.

Reading Decimals

The charts on page 70 will help you read decimals.

NUMBER OF PLACES	DECIMAL NAMES	EXAMPLES	PROPER FRACTION
one place	= tenths	.7	= 7/10
two places	= hundredths	.16	= 16/100
three places	= thousandths	.149	= 149/1000
four places	= ten-thousandths	.6021	= 6,021/10,000
five places	= hundred-thousandths	.00152	= 152/100,000

In decimals and our whole number system, each place has a value of one-tenth of that to the left. Each place has a value ten times the place to the right.

10,000	1,000	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1,000}$	$\frac{1}{10,000}$
TEN THOUSANDS...	THOUSANDS	HUNDREDS	TENS	ONES	. TENTHS	HUNDREDTHS	THOUSANDTHS	TEN THOUSANDTHS...

Each place has a value one-tenth of that to the left. Each place has a value ten times the place to the right.

The decimal point (.) separates the whole number portion from the fractional portion of the numeral. Mixed decimals, like mixed fractions, are written with the whole number to the left. Any point to the right of the decimal is a decimal fraction. The number of places to the right of the decimal will tell you the decimal name of that fraction. Remember to use the word "and" to separate the whole number from the fraction.

Examples of Reading Decimals

1. Read the following decimal .068

   Step 1. Read the number 68.

   Step 2. Count the number of places. .068 has three places. Three places means thousandths.

   Step 3. Read .068 as sixty-eight thousandths.

2. Read the following mixed decimal 5.75

   Step 1. Read the whole number 5.

   Step 2. Read the decimal fraction: seventy-five.

   Step 3. Count the number of places the decimal fraction is to the right. The decimal .75 is two places to the right. Two places means hundredths.

   Step 4. Read the whole number first and then the decimal fraction. Insert the word "and " between the whole number and the decimal fraction. The number is read as five and seventy-five hundredths.

Exercises (If tutors are familiar with using decimals, skip this section or suggest it to be used for later practice with students.)

Write the following decimals in words:

1. .5 _____

2. .07 _____

3. .79 _____

4. .489 _____

5. .6,102 _____

Writing Decimals

When you are writing decimals from words, make sure you have the correct number of places. Remember to use 0 to hold place value. Remember that "and" is represented by a (.).

Example 1. Write nine hundredths.

Step 1. Write the number 9.

Step 2. Hundredths mean 2 places. Since there is only one number, you need to place 0 in the tenths position. Write .09.

Example 2. Write six and 45 hundredths.

Step 1. Write the whole number 6 and place a decimal point (.) after the six to represent the "and".

Step 2. Then write 45. 45 uses two places for the hundredths. Your final number should look like 6.45.

Example 3. Write five dollars and seven cents.

Step 1. Our money system is based on the decimal system. Write the dollar sign first. This lets the reader know that we are dealing with money!!!

Step 2. Write the whole number five. Place the decimal point after five to denote a fraction will be following.

Step 3. Think about seven cents. You need to be writing in the hundredths placement for cents, but you only have one number. Use the zero to hold the place. Write the seven. Your final number should be $5.07.

Exercises

Write the following as decimals or mixed decimals or dollars and cents. (If the tutors feel confident in this area, skip these exercises.)

1. nine tenths _____

2. four hundred forty-four ten thousandths _____

3. six dollars and twenty cents _____

4. nine thousand and ninety-nine thousandths _____

ADDING DECIMALS

When adding decimals, place the numbers in vertical columns, with each decimal point directly underneath the others. The decimal point in the answer should be directly underneath the decimal points of the addends.

Example

John went to the store and bought 3 gallons of milk for a total of $3.15, two packages of 10 ounces of cheese for a total of $2.40, 3 packages of peas for a total of $2.64; how much did he spend?

Step 1. Write the numbers down so that the decimals are vertically in alignment. Remember, every whole number has a potential decimal point after it.

Step 2. Add the numbers.

$3.25
\+ $2.40
$2.64
$8.09

With students, use real money or play money if they need to understand the concepts of decimal addition on a concrete level.

Exercises

1. The Johnsons are driving across the country to see their children and find some places to fish. They do not want to drive more than 325 miles in a day. The first day they plan to visit Mariesville for lunch and Sunnytown and Piqua where there are interesting bait and tackle stores.

   The distance between Mariesville and Sunnytown is 175.25 miles. The distance between Sunnytown and Piqua is 95.25 miles. It is 50.5 miles from their house to Mariesville. Can they visit all three places and stay within their 325 mile limit per day?

2. Jonathan's normal temperature is 98.8. When he had a fever, his temperature went up 4.3 degrees. What was his temperature when he had a fever?

3. Maria welded together pieces of pipe that were 42.75 inches long, 29 inches long, and 16.2 inches long. How long was the pipe when all the pieces were welded?

4. Bob was working in a grocery store part time. He was paid $4.50 per hour. The first day he earned $6.00; the second day he earned $4.50; the third day he earned $5.30; the fourth day he earned $5.00, and the fifth day he earned $4.50. What was he paid after the 5 days? How would you make the solution of this problem more concrete to help students who are having difficulty with decimal fractions?

5. The City Hardware Store had their annual sale.

	Sale Price	Regular Price
Garden cart	$20.25	$25.00
Garden shovel	4.85	7.50
Garden hose	10.35	14.95
Hammer	5.90	8.10

   Barbara Cordell went to City Hardware store to buy several items. Everything was still on sale, except for the hammer. She bought the garden cart, the garden hose, and the hammer. What was the cost of her total purchase?

SUBTRACTING DECIMALS

As with all subtraction, place value is important. Make sure when you write the problem that decimals are lined up or are in vertical alignment. Use zeros to the right so that each decimal fraction has the same number of places. Subtraction with decimals follows the same rules as with whole numbers.

Subtraction is used with questions like, "How much remains after part is used?" "What is the difference between one quantity and another?" How much heavier/bigger/taller is one item than another?

Example: $429.23 - $8 = ?

Step 1. Generally, the larger number goes on top. The second number is written underneath with the decimal points lined up.

Step 2. Add zeros to give the bottom number the same number of places as the top number.

Step 3. Subtract and write the decimal in alignment with the numerals in the problem.

$$\begin{array}{r} \$429.23 \\ -\ \ 8.00 \\ \hline \$421.23 \end{array}$$

With students who need to have concrete experiences with subtraction, use real money or play money especially when you are dealing with large numbers. Most of us do not have hundreds or thousands of dollars to use to teach large number concepts. You can also use place value blocks, rods, chips, measuring tapes or sticks, stop watches and clocks.

Exercises

1. Jolt of Lightning, who won the horse race in May, ran the mile in 1.48 minutes. Derby Joe came in second. She ran the mile in 1.59 minutes. What was the difference in their times? What is the relationship of 1.48 minutes to minutes and seconds?

2. The metal platform of a bridge that is 126.2 meters long in the summer shrinks by 1.06 meters in the winter. What is the length of the bridge platform in the winter?

3. If the price of gasoline rises from 96.8 cents to 99.3 cents, how much has the price of gasoline increased?

4. In 1965 there were 93.7 million telephones in use in the U.S. In 1968 there were 108.6 million telephones. In 1970 there were 120.2 million phones. What was the increase in the number of telephones in use from 1965 to 1970?

5. If the perimeter of a triangular plot of ground is 58.541 feet and two of its sides measure 18.9 feet and 31.42 feet, what is the length of its third side?

6. Mr. Chung bought a pair of pants for $15.95, a pair of gloves for $4.20 and a shirt for $8.89. What was his change from $30.00?

7. Alice's car has a gasoline tank which holds 18 gallons. Alice fills her gas tank with 10.5 gallons. How much gasoline was in the tank before she filled it?

MULTIPLYING DECIMALS

Multiply the numbers with decimals the same way as you multiply whole numbers. The decimal point in the answer (product) needs to be the same number of places as the total decimal places in the multiplicand and multiplier.

Use concrete objects whenever possible.

Examples

"How much does it cost to purchase 2 pounds of onions at $.52 a pound?

There are several ways to answer this question:

1. Addition

$ .52
+ .52
$1.04

2. Multiplication

$ .52 or 52/100 x 2 = 104/100 = $1.04

$ .52 (multiplicand) has 2 decimal places
x 2 (multiplier) has 0 decimal places
$1.04 (product) has 2 decimal places

Unlike addition and subtraction in multiplication, there does not need to be an equal number of places after the decimal for the multiplicand and multiplier.

How long does a metal rod have to be if you need to cut 5 rods of 6.75 inches?

Step 1. Multiply the numbers: 5 x 6.75 as whole numbers,
5 x 675 = 3375.

Step 2. Find the placement of the decimal point.

$ 6.75 (multiplicand)
x 5 (multiplier)
$33.75 (product)

There are 2 decimal places in 6.75 and 0 in 5. Place the decimal point in 3375 counting 2 places from right to left. $33.75.
If a metal rod costs $.25 an inch, how many dollars would a rod 45.5 inches long cost?

Follow the same steps as in the previous example:

45.5
x $ .25
2275
910

$11.375 = $11.38

To illustrate how decimals work in multiplication, let's do this example as a fraction problem:

45.5 x $.25 =

455/10 x 25/100 =

11,375/1,000 = 11 375/1,000 =

$11.375 or $11.38 rounded off to the nearest cent

To look at using 0 for place value, let's do the following problem:

What is the product of .004 and .02?

Step 1. Write the problem and multiply as if these were whole numbers.

$$\begin{array}{r} .004 \\ \times\ .02 \\ \hline 8 \end{array}$$

Step 2. Add the number of decimal places in the multiplicand and the multiplier to find out the number of decimal places you need in the product.

$$\begin{array}{r} .004 \\ \times\ .02 \\ \hline .00008 \end{array}$$ (Place four 0's to the left of 8 as placeholders.)

Multiplying Decimals by 10, 100, 1000

Since our system of math is based on decimals, when you multiply decimal fractions by 10, 100, or 1,000, you can move the decimal point one (10), two (100), or three (1,000) places to the right, according to the multiplicand.

For example:

.34 x 10 = 3.4 (one space)

.7398 x 100 = 73.98 (two spaces)

56.888 x 1000 = 56,888 (three spaces)

5.4 x 100 = 540

Exercises

1. One inch is equal to 2.54 centimeters. How many centimeters are there in a foot?

2. Yvonne makes $4.50 per hour at her second job. If she works 4.5 hours on Monday and 3.75 hours on Tuesday, how much gross pay did she earn in those two days?

3. Clayton belongs to a union which offers a pension plan. Each week $20.25 is deducted from Clayton's paycheck for the pension plan. How much has Clayton contributed to the fund after 2.5 years?

4. Juanita has a rectangular plot of land that she wants to use for her garden. The plot is 25.7 feet wide and 54.32 feet long. What is the area of her garden?

5. Mr. Johnson has a car which uses one gallon of gasoline for every 21.7 miles driven in the city. If the capacity of his gasoline tank is 14.5 gallons, how far can he drive when his tank is full? Leave 1 gallon of gas in the tank for safety's sake.

6. Find the cost of 6.25 yards of cloth at $4.15 a yard. Round off to the nearest cent.

DIVIDING BY DECIMALS

Dividing by decimals can be confusing for all of us because we expect the quotient to be smaller than the dividend. A useful way to approach division with decimals and place value is through the use of graph paper strips and decimal bar example sheets.

To prepare for decimal division, have the tutors cut out seven 1x10 strips from their graph paper. Each strip will be one unit. Have blank decimal bar example sheets, where 10 0.1 bars = one unit, and markers.

Write $1\overline{)5}$ on the board. Ask how many groups of 1 are in 5. Tutors will divide five by one. Repeat for $2 \div 4$ and $4 \div 8$.

Have tutors place three of the graph paper strips on their desk.

Write $0.1\overline{)3}$

How many 0.1s are contained in 3? These are not whole groups but tenths of groups. Tutors can count tenths on the decimal bar examples.

The answer is 30.

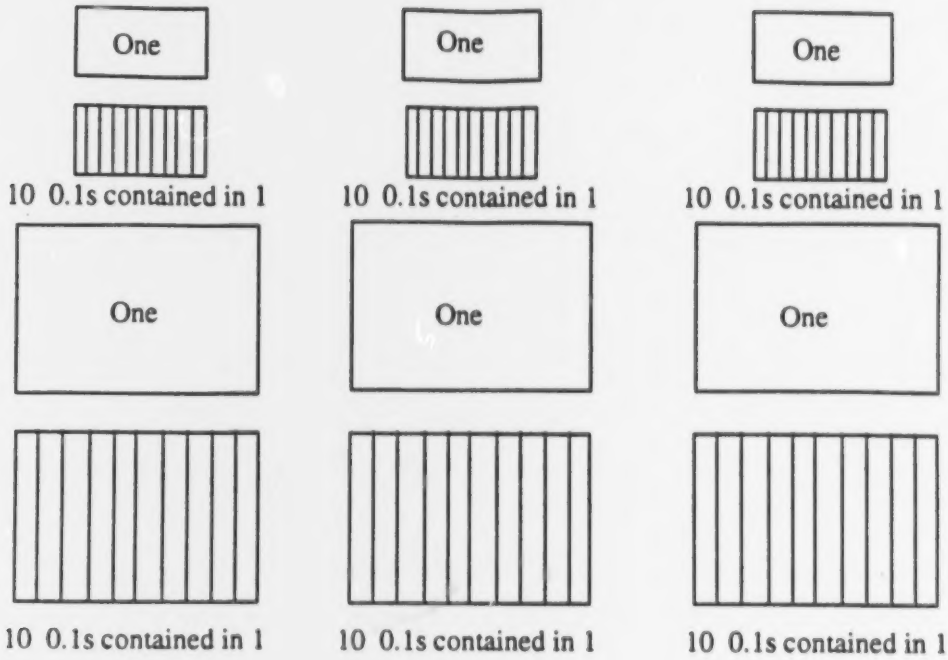
Then ask tutors what is the answer to this problem? $.1\overline{)2}$

Have the tutors use their markers to color two whole bars. Then ask the tutors to color 0.1 at a time on the decimal bar until they can show how many .01 are contained in 2.

The answer is 20.

Ask the tutors if they see any patterns between $0.1 \div 2$ and $1 \div 20$.

How do we get from 0.1 to 1 and from 2 to 20? We have multiplied both by 10. We have changed the place value of both numbers equally so that we have not changed the relationship between the numbers. It is much easier to divide by whole numbers than decimals.


One
One
One
10 0.1s contained in 1
10 0.1s contained in 1
10 0.1s contained in 1
One
One
One
10 0.1s contained in 1
10 0.1s contained in 1
10 0.1s contained in 1

Dividing Decimals by Whole Numbers

When dividing decimals by a whole number, bring the decimal point up in the answer directly above its position in the quotient.

Example 1.

```
          1.45  quotient
divisor  5)7.25  dividend
         5
         22
         20
         25
         25
```

To understand how this division problem works, let's restate it as a fraction problem.

$7.25 \div 5 =$

$725/100 \div 5/1 =$

145

~~725~~$/100 \times 1/$~~5~~ $=$

$145/100 = 1.45$

Use quarters to solve this problem concretely.

Exercises

1. Roberta has $5.50. If she divides the money equally between her five children, how much money will each receive?

2. Jonathan bought 4.5 pounds of potatoes. He is sharing the potatoes with two friends. How many pounds of potatoes should each person receive?

Division of Decimals By Decimals

When dividing by a decimal, change the problem to division by a whole number. Let's use fractions to illustrate how this works.

$.60 ÷ $.30 =

$$\frac{.60 \times 10}{.30 \times 10} =$$

$$\frac{6}{3} = 2$$

How many $.30's are there in $.60? Two is the answer.

As with fractions, when you need to multiply the divisor by 10, 100, 1000 to make it a whole number, you also need to multiply the dividend by the same number.

.3)$\overline{.6}$ = 3.)$\overline{6.}$ = 2. = 2

Place the decimal point in the quotient directly above its new place in the dividend. By equally changing the place values for the divisor and dividend, the division process becomes easier.

Example

John paid $4.58 for 5.357 gallons of gasoline. How much did each gallon cost to the nearest cent?

First step.

Multiply the divisor by 100 to make a whole number. $4.58 x 100 = 458

Second step.

Multiply the dividend by 100. 5.357 x 100 = 535.7

Third step.

Place the decimal point in the quotient directly above the decimal point in the dividend.

Do the division.

$$\begin{array}{r} \$\ 1.1696 \\ \$458.\ )\ 535.7 \end{array}$$

Fourth step

Round off $1.1696 to the nearest cent.

The answer is $1.17 per gallon.

Exercises for division by decimals

1. Tomatoes are currently selling for $.89 a pound. How many pounds did Juanita buy for $3.50, to the nearest cent.

2. Find the average price for a pound of broccoli. In January, one pound cost $1.25; in March it cost $1.19; in May it cost $1.24, and in July it cost $.99.

3. There are 2.54 centimeters in one inch. How many inches are there in 90.54 centimeters?

4. If a plane flew 2,562.2 miles in 5.9 hours, what was its average speed in miles per hour?

5. Eunice is balancing her checkbook. She has written 12 checks for the month of May. The total she has spent is $1,575. One of the checks is written for $550 for rent. What is the average amount of the other 11 checks?

PERCENTAGES

Skills to be Learned

Changing decimals to percents
Changing percents to decimals
Changing fractions to percents
Changing percents to fractions
Finding a percent of a number
Finding what percent one number is of another
Finding the number when a percent of it is given

What are percents? Percent is another way to describe a fraction of something. However, percents are based on 100. The only denominator for percents is 100. The denominator is not written but is indicated by the percent sign, "%".

.25 = 25/100 = 25%

Percent is one of the most common ways we have of expressing comparisons between quantities. We see percentages in the newspapers and hear them used on the radio every day. We hear about interest rates on loans for 6.25%. We read about sales on clothing, 35% off of sweaters, 45% off of all summer shoes. Percent is used in businesses for sales tax, quality control, inventory turnaround, profit and losses. It is a term that we all are familiar with and should be comfortable using at work and at home.

With percents, graph paper with squares of 100, counters with one hundredth values are useful to provide visual and concrete experiences.

Example

Using a piece of graph paper with one hundred squares outlined, color in 1 square and mark it A. Then color in 10 squares and mark it B. Color in 5 squares and mark it C. Finally, color in 25 squares and mark it D.

Area A covers 1/100 of the total square, so Area A is 1% of the total area.

Area B covers 10/100 of the total square, so it is 10% of the total area.

Area C covers 5/100 of the total square, so it is 5% of the total area.

Area D covers 25/100 of the total square, so it is 25% of the total area.

CHANGING PERCENTS TO DECIMALS

When changing percents to decimals we know the percents are based on hundredths.

Example

50% = 50/100 = .50

To change a percent to a decimal: Divide the number by 100 by moving the decimal point two places to the left in the original number; omit the percent sign.

Examples

25% = .25

12.5% = .125

66.6% = .666

Exercise

At a store sale, Ms. Smith saved 35% on a purchase of clothes worth $125. How much did she pay for the clothes?

CHANGING DECIMALS TO PERCENTS

To change decimals to percents, move the decimal point two places to the right and write the percent sign "%". Since percents are hundredths, two spaces over to the right corresponds with that place value.

Examples:

.35 = 35%

.8 = 80%

.05 = 5%

CHANGING FRACTIONS TO PERCENTS

There are two common ways to change fractions to percents.

1. Multiply by 100%.

   For example, 3/4 x 100%/1 = 300%/4 = 75%

2. Divide the numerator by the denominator.

   numerator - which tells how many parts you have
   denominator - which tells how many parts in the whole

```
   .75
4) 3.00
```

   Move the decimal point two places to the right for the hundredth place value.

   .75 = 75%

CHANGING PERCENTS TO FRACTIONS

1. Write the percent as a fraction with 100 as the denominator.

2. Reduce the fraction

   For example, change 75% to a fraction.

   75% = 75/100 = 3/4

FINDING A PERCENT OF A NUMBER

To find a percent of a number, change the percent to a decimal or fraction and multiply.

Example: Find 33.3% of 90.

Change the percent to a decimal and multiply.

.333 x 90 = 30.070 = 30

Change the percent to a fraction.

33.3% = 1/3

Multiply 1/3 x 90 = 30.

FINDING WHAT PERCENT ONE NUMBER IS OF ANOTHER

To find what percent one number is of another, make a fraction by putting the part over the whole. Reduce the fraction. Then change it to a percent.

Example

2 is what % of 8?

Divide the part by the whole.

$$2/8 = 1/4 = 4)\overline{1.00}\quad .25$$

.25 = 25%

FINDING THE NUMBER WHEN ONLY A PERCENT OF IT IS GIVEN

If a percent of a number is given and you need to find out what the whole number is, change the percent into a fraction or a decimal. Then divide it into the number you have.

Example: 10% of what number is 15?

Method 1.

Step 1. Change the percent to a fraction. 10% = 1/10

Step 2. Divide the fraction into the number you have.

15 ÷ 1/10 = 15/1 x 10/1 = 150

Method 2.

Step 1. Change the percent to a decimal. 10% = .1

Step 2. Divide the decimal into the number you have.

$$.1\overline{)15.0} \quad 150.$$

THE MAGIC CIRCLE

THE MAGIC CIRCLE IS A TOOL TO ASSIST YOU WITH SOLVING PERCENT PROBLEMS. GIVEN TWO OF THE THREE ELEMENTS: PART, WHOLE OR PERCENT, THE THIRD WILL "MAGICALLY APPEAR."

First, identify the part, whole and percent. Next, place them correspondingly in the magic circle.

1. Divide the part by the whole to find the percent.
2. Divide the part by the percent to find the whole.
3. Mutliply the whole by the percent to find the part.

Percent Exercises

1. Samantha entered in her computer and printed 36 pages of correspondence by Wednesday. If this represents 75% of the correspondence that she is responsible for this week, how many pieces of correspondence will she need to complete by Friday?

2. The Smith Company had a profitable year. They gave all of their full time employees a 5% increase. Robert received a $10.00 increase. What was his original salary before the increase?

3. Jason was sick for 12 work days in March. What percent of the work days in March was Jason sick? (There were 22 work days in March.)

4. The payroll of the Edenheis company increased 5% over last month. If the payroll is $30,500 this month, what was the payroll last month?

5. There are 64 members of a community block association. If 24 members came, what percent of the association was there? In order to vote on policy or decisions, 40% of the members need to be there. Did they meet the quorum?

6. The company borrowed $1,250,000 for one year. If the interest rate was 6.5% how much did they need to pay back after the first year?

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AN INTRODUCTION TO THE WORLD OF METRICS
OR STOP THE WORLD; I WANT TO GET OFF!

The world of metrics is a much easier "number world" to move around in than the one we are currently using. The metric system is based on multiples of 10, like our decimal system and our monetary system. You know, 10 pennies equal a dime, 10 dimes equal a dollar, etc.

Multiples of 10 are used to determine length, volume, and weight. It is much easier to add, subtract, multiply, and divide by 10 than by 12 (the ruler), and there are no fractions!

We already use the metric system in our everyday lives and are not even aware of it. For example, soft drinks can be purchased in a two liter bottle. We drive cars with 2.2 and 3.8 liter engines. Now that's not so threatening, is it?

Just how did the metric system come to be anyway? Well, in 1789, the French decided to use a very small part of a straight line between the equator and the north pole as the new standard unit of length which they called a *meter*. The word, meter, comes from the Greek word for measure. The meter is the base for the metric system, so all measurements of length, volume and weight are given in meters.

Let's take a closer look at the world of metrics. We will begin with one form of measurement, length or distance.

LENGTH OR DISTANCE

A meter (m) is a little longer than a yardstick, 10% longer, about as long as a tall person's stride. To divide the meter into smaller units, simply divide by 10.

There are 100 equal units in a meter. These units are called *centi*, which is *Latin for hundred*. **There are 100 centimeters (cm) in a meter.** A single centimeter is about the size of five nickels stacked on top of one another.

There is also another unit of measure in distance or length which is smaller than the centimeter. It is called the **millimeter (mm)** and is the smallest unit of length in the metric system. A meter divided into **one thousand equal parts is a millimeter**. A millimeter is one tenth of the size of a centimeter. A millimeter is about the thickness of a dime.

There are times when lengths or distances **longer than a meter** are needed. The metric system uses the term **kilometer (km)** which means multiplied by one thousand. **A kilometer is 1,000 meters long.**

A kilometer is approximately 5/8 of our mile or 3300 feet. One hundred kilometers equals approximately 60 miles. Our road signs will someday read in kilometers rather than miles. Our speed will be measured in kilometers per hour (km/h) rather than miles per hour (mph).

Let's complete a simple problem to find length or distance in metric. Now, don't panic. You have a conversion chart to help you, and you already know how to multiply. So, let's get going! First, an explanation of the conversion chart is in order.

METRIC CONVERSION CHART (It is your best friend).

The metric conversion chart has a list of numbers called **conversion factors by which you multiply or divide in order to convert to the metric system or the English system**. If you want to convert the English system (feet, inches, gallons, quarts, etc.) to the metric system, multiply the English unit times the conversion factor third column on the chart) to find the metric unit you desire.

If you are converting metric to the English system, **divide** the number of metric units by the conversion factor (third column in the chart). This step will give you an answer in the English system: ounces, pounds, cups, pints, inches, feet, etc.

METRIC CONVERSION FACTORS

	INCH/POUND UNIT (number of:)	TIMES	CONVERSION FACTOR	GIVES YOU (approx.)	METRIC UNIT
LENGTH (Distance)	inches	x	2.5	the number of:	centimeters
	feet	x	30	the number of:	centimeters
	yards	x	0.9	the number of:	meters
	miles	x	1.6	the number of:	kilometers
VOLUME (Capicity)	teaspoons	x	5	the number of:	milliliters
	tablespoons	x	15	the number of:	milliliters
	fluid ounces	x	30	the number of:	milliliters
	cups	x	0.24	the number of:	liters
	pints	x	0.47	the number of:	liters
	quarts	x	0.95	the number of:	liters
	gallons	x	3.8	the number of:	liters
WEIGHT (Mass)	ounces	x	28	the number of:	grams
	pounds	x	0.45	the number of:	kilograms

	METRIC UNIT (number of:)	DIVIDED BY:	CONVERSION FACTOR	GIVES YOU (approx.)	INCH/POUND UNIT
LENGTH (Distance)	centimeters	÷	2.5	the number of:	inches
	centimeters	÷	30	the number of:	feet
	meters	÷	0.9	the number of:	yards
	kilometers	÷	1.6	the number of:	miles
VOLUME (Capicity)	milliliters	÷	5	the number of:	teaspoons
	milliliters	÷	15	the number of:	tablespoons
	milliliters	÷	30	the number of:	fluid ounces
	liters	÷	0.24	the number of:	cups
	liters	÷	0.47	the number of:	pints
	liters	÷	0.95	the number of:	quarts
	liters	÷	3.8	the number of:	gallons
WEIGHT (Mass)	grams	÷	28	the number of:	ounces
	kilograms	÷	0.45	the number of:	pounds

BEST COPY AVAILABLE

METRIC CONVERSION CHART

inch		mm	inch		mm	inch		mm	inch		mm	inch		mm
	.001	0.0254		.101	2.5654		.201	5.1054		.301	7.6454		.401	10.1854
	.002	0.0508		.102	2.5908		.202	5.1308		.302	7.6708		.402	10.2108
	.003	0.0762		.103	2.6162		.203	5.1562		.303	7.6962		.403	10.2362
	.004	0.1016		.104	2.6416	13/64	.2031	5.1594		.304	7.7216		.404	10.2616
	.005	0.1270		.105	2.6670		.204	5.1816		.305	7.7470		.405	10.2870
	.006	0.1524		.106	2.6924		.205	5.2070		.306	7.7724		.406	10.3124
	.007	0.1778		.107	2.7178		.206	5.2324		.307	7.7978	13/32	.4062	10.3187
	.008	0.2032		.108	2.7432		.207	5.2578		.308	7.8232		.407	10.3378
	.009	0.2286		.109	2.7686		.208	5.2832		.309	7.8486		.408	10.3632
	.010	0.2540	7/64	.1094	2.7781		.209	5.3086		.310	7.8740		.409	10.3886
	.011	0.2794		.110	2.7940		.210	5.3340		.311	7.8994		.410	10.4140
	.012	0.3048		.111	2.8194		.211	5.3594		.312	7.9248		.411	10.4394
	.013	0.3302		.112	2.8448		.212	5.3847	5/16	.3125	7.9375		.412	10.4648
	.014	0.3556		.113	2.8702		.213	5.4101		.313	7.9502		.413	10.4902
	.015	0.3810		.114	2.8956		.214	5.4356		.314	7.9756		.414	10.5156
1/64	.0156	0.3969		.115	2.9210		.215	5.4610		.3150	8.0000		.415	10.5410
	.016	0.4064		.116	2.9464		.216	5.4864		.315	8.0010		.416	10.5664
	.017	0.4318		.117	2.9718		.217	5.5118		.316	8.0264		.417	10.5918
	.018	0.4572		.118	2.9972		.218	5.5372		.317	8.0518		.418	10.6172
	.019	0.4826		.1181	3.0000	7/32	.2187	5.5562		.318	8.0772		.419	10.6426
	.020	0.5080		.119	3.0226		.219	5.5626		.319	8.1026		.420	10.6680
	.021	0.5334		.120	3.0480		.220	5.5880		.320	8.1280		.421	10.6934
	.022	0.5588		.121	3.0734		.221	5.6134		.321	8.1534	27/64	.4219	10.7156
	.023	0.5842		.122	3.0988		.222	5.6388		.322	8.1788		.422	10.7188
	.024	0.6096		.123	3.1242		.223	5.6642		.323	8.2042		.423	10.7442
	.025	0.6350		.124	3.1496		.224	5.6896		.324	8.2296		.424	10.7696
	.026	0.6604	1/8	.125	3.1750		.225	5.7150		.325	8.2550		.425	10.7950
	.027	0.6858		.126	3.2004		.226	5.7404		.326	8.2804		.426	10.8204
	.028	0.7112		.127	3.2258		.227	5.7658		.327	8.3058		.427	10.8458
	.029	0.7366		.128	3.2512		.228	5.7912		.328	8.3312		.428	10.8712
	.030	0.7620		.129	3.2766		.229	5.8166	21/64	.3281	8.3344		.429	10.8966
	.031	0.7874		.130	3.3020		.230	5.8420		.329	8.3566		.430	10.9220
1/32	.0312	0.7937		.131	3.3274		.231	5.8674		.330	8.3820		.431	10.9474
	.032	0.8128		.132	3.3528		.232	5.8928		.331	8.4074		.432	10.9728
	.033	0.8382		.133	3.3782		.233	5.9182		.332	8.4328		.433	10.9982
	.034	0.8636		.134	3.4036		.234	5.9436		.333	8.4582		.4331	11.0000
	.035	0.8890		.135	3.4290	15/64	.2344	5.9531		.334	8.4836		.434	11.0236
	.036	0.9144		.136	3.4544		.235	5.9690		.335	8.5090		.435	11.0490
	.037	0.9398		.137	3.4798		.236	5.9944		.336	8.5344		.436	11.0744
	.038	0.9652		.138	3.5052		.2362	6.0000		.337	8.5598		.437	11.0998
	.039	0.9906		.139	3.5306		.237	6.0198		.338	8.5852	7/16	.4375	11.1125
	.0394	1.0000		.140	3.5560		.238	6.0452		.339	8.6106		.438	11.1252
	.040	1.0160	9/64	.1406	3.5719		.239	6.0706		.340	8.6360		.439	11.1506
	.041	1.0414		.141	3.5814		.240	6.0960		.341	8.6614		.440	11.1760
	.042	1.0668		.142	3.6068		.241	6.1214		.342	8.6868		.441	11.2014
	.043	1.0922		.143	3.6322		.242	6.1468		.343	8.7122		.442	11.2268
	.044	1.1176		.144	3.6576		.243	6.1722	11/32	.3437	8.7312		.443	11.2522
	.045	1.1430		.145	3.6830		.244	6.1976		.344	8.7376		.444	11.2776
	.046	1.1684		.146	3.7084		.245	6.2230		.345	8.7630		.445	11.3030
3/64	.0469	1.1906		.147	3.7338		.246	6.2484		.346	8.7884		.446	11.3284
	.047	1.1938		.148	3.7592		.247	6.2738		.347	8.8138		.447	11.3538
	.048	1.2192		.149	3.7846		.248	6.2992		.348	8.8392		.448	11.3792
	.049	1.2446		.150	3.8100		.249	6.3246		.349	8.8646		.449	11.4046
	.050	1.2700		.151	3.8354	1/4	.250	6.3500		.350	8.8900		.450	11.4300
	.051	1.2954		.152	3.8608		.251	6.3754		.351	8.9154		.451	11.4554
	.052	1.3208		.153	3.8862		.252	6.4008		.352	8.9408		.452	11.4808
	.053	1.3462		.154	3.9116		.253	6.4262		.353	8.9662		.453	11.5062
	.054	1.3716		.155	3.9370		.254	6.4516		.354	8.9916	29/64	.4531	11.5094
	.055	1.3970		.156	3.9624		.255	6.4770		.3543	9.0000		.454	11.5316
	.056	1.4224	5/32	.1562	3.9687		.256	6.5024		.355	9.0170		.455	11.5570
	.057	1.4478		.157	3.9878		.257	6.5278		.356	9.0424		.456	11.5824
	.058	1.4732		.1575	4.0000		.258	6.5532		.357	9.0678		.457	11.6078
	.059	1.4986		.158	4.0132		.259	6.5786		.358	9.0932		.458	11.6332
	.060	1.5240		.159	4.0386		.260	6.6040		.359	9.1186		.459	11.6586
	.061	1.5494		.160	4.0640		.261	6.6294	23/64	.3594	9.1281		.460	11.6840
	.062	1.5748		.161	4.0894		.262	6.6548		.360	9.1440		.461	11.7094
1/16	.0625	1.5875		.162	4.1148		.263	6.6802		.361	9.1694		.462	11.7348
	.063	1.6002		.163	4.1402		.264	6.7056		.362	9.1948		.463	11.7602
	.064	1.6256		.164	4.1656		.265	6.7310		.363	9.2202		.464	11.7856
	.065	1.6510		.165	4.1910	17/64	.2656	6.7469		.364	9.2456		.465	11.8110
	.066	1.6764		.166	4.2164		.266	6.7564		.365	9.2710		.466	11.8364
	.067	1.7018		.167	4.2418		.267	6.7818		.366	9.2964		.467	11.8618
	.068	1.7272		.168	4.2672		.268	6.8072		.367	9.3218		.468	11.8872
	.069	1.7526		.169	4.2926		.269	6.8326		.368	9.3472	15/32	.4687	11.9062
	.070	1.7780		.170	4.3180		.270	6.8580		.369	9.3726		.469	11.9126
	.071	1.8034		.171	4.3434		.271	6.8834		.370	9.3980		.470	11.9380
	.072	1.8288	11/64	.1719	4.3656		.272	6.9088		.371	9.4234		.471	11.9634
	.073	1.8542		.172	4.3688		.273	6.9342		.372	9.4488		.472	11.9888
	.074	1.8796		.173	4.3942		.274	6.9596		.373	9.4742		.4724	12.0000
	.075	1.9050		.174	4.4196		.275	6.9850		.374	9.4996		.473	12.0142
	.076	1.9304		.175	4.4450		.2756	7.0000	3/8	.375	9.5250		.474	12.0396
	.077	1.9558		.176	4.4704		.276	7.0104		.376	9.5504		.475	12.0650
	.078	1.9812		.177	4.4958		.277	7.0358		.377	9.5758		.476	12.0904
5/64	.0781	1.9844		.178	4.5212		.278	7.0612		.378	9.6012		.477	12.1158
	.0787	2.0000		.179	4.5466		.279	7.0866		.379	9.6266		.478	12.1412
	.079	2.0066		.180	4.5720		.280	7.1120		.380	9.6520		.479	12.1666
	.080	2.0320		.181	4.5974		.281	7.1374		.381	9.6774		.480	12.1920
	.081	2.0574		.182	4.6228	9/32	.2812	7.1437		.382	9.7028		.481	12.2174
	.082	2.0828		.183	4.6482		.282	7.1628		.383	9.7282		.482	12.2428
	.083	2.1082		.184	4.6736		.283	7.1882		.384	9.7536		.483	12.2682
	.084	2.1336		.185	4.6990		.284	7.2136		.385	9.7790		.484	12.2936
	.085	2.1590		.186	4.7244		.285	7.2390		.386	9.8044	31/64	.4844	12.3031
	.086	2.1844		.187	4.7498		.286	7.2644		.387	9.8298		.485	12.3190
	.087	2.2098	3/16	.1875	4.7625		.287	7.2898		.388	9.8552		.486	12.3444
	.088	2.2352		.188	4.7752		.288	7.3152		.389	9.8806		.487	12.3698
	.089	2.2606		.189	4.8006		.289	7.3406		.390	9.9060		.488	12.3952
	.090	2.2860		.190	4.8260		.290	7.3660	25/64	.3906	9.9219		.489	12.4206
	.091	2.3114		.191	4.8514		.291	7.3914		.391	9.9314		.490	12.4460
	.092	2.3368		.192	4.8768		.292	7.4168		.392	9.9568		.491	12.4714
	.093	2.3622		.193	4.9022		.293	7.4422		.393	9.9822		.492	12.4968
3/32	.0937	2.3812		.194	4.9276		.294	7.4676		.3937	10.0000		.493	12.5222
	.094	2.3876		.195	4.9530		.295	7.4930		.394	10.0076		.494	12.5476
	.095	2.4130		.196	4.9784		.296	7.5184		.395	10.0330		.495	12.5730
	.096	2.4384		.1969	5.0000	19/64	.2969	7.5406		.396	10.0584		.496	12.5984
	.097	2.4638		.197	5.0038		.297	7.5438		.397	10.0838		.497	12.6238
	.098	2.4892		.198	5.0292		.298	7.5692		.398	10.1092		.498	12.6492
	.099	2.5146		.199	5.0546		.299	7.5946		.399	10.1346		.499	12.6746
	.100	2.5400		.200	5.0800		.300	7.6200		.400	10.1600	1/2	.500	12.7000

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METRIC CONVERSION CHART

Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
.501	12.7254	.600	15.2400	.701	17.8054	.800	20.3200	.901	22.8854
.502	12.7508	.601	15.2654	.702	17.8308	.801	20.3454	.902	22.9108
.503	12.7762	.602	15.2908	.703	17.8562	.802	20.3708	.903	22.9362
.504	12.8016	.603	15.3162	45/64 .7031	17.8594	.803	20.3962	.904	22.9616
.505	12.8270	.604	15.3416	.704	17.8816	.804	20.4216	.905	22.9870
.506	12.8524	.605	15.3670	.705	17.9070	.805	20.4470	.9055	23.0000
.507	12.8778	.606	15.3924	.706	17.9324	.806	20.4724	.906	23.0124
.508	12.9032	.607	15.4178	.707	17.9578	.807	20.4978	29/32 .9062	23.0187
.509	12.9286	.608	15.4432	.708	17.9832	.808	20.5232	.907	23.0378
.510	12.9540	.609	15.4686	.7087	18.0000	.809	20.5486	.908	23.0632
.511	12.9794	39/64 .6094	15.4781	.709	18.0086	.810	20.5740	.909	23.0886
.5118	13.0000	.610	15.4940	.710	18.0340	.811	20.5994	.910	23.1140
.512	13.0048	.611	15.5194	.711	18.0594	.812	20.6248	.911	23.1394
.513	13.0302	.612	15.5448	.712	18.0848	13/16 .8125	20.6375	.912	23.1648
.514	13.0556	.613	15.5702	.713	18.1102	.813	20.6502	.913	23.1902
.515	13.0810	.614	15.5956	.714	18.1356	.814	20.6756	.914	23.2156
33/64 .5156	13.0968	.615	15.6210	.715	18.1610	.815	20.7010	.915	23.2410
.516	13.1064	.616	15.6464	.716	18.1864	.816	20.7264	.916	23.2664
.517	13.1318	.617	15.6718	.717	18.2118	.817	20.7518	.917	23.2918
.518	13.1572	.618	15.6972	.718	18.2372	.818	20.7772	.918	23.3172
.519	13.1826	.619	15.7226	23/32 .7187	18.2562	.819	20.8026	.919	23.3426
.520	13.2080	.620	15.7480	.719	18.2626	.820	20.8280	.920	23.3680
.521	13.2334	.621	15.7734	.720	18.2880	.821	20.8534	.921	23.3934
.522	13.2588	.622	15.7988	.721	18.3134	.822	20.8788	59/64 .9219	23.4156
.523	13.2842	.623	15.8242	.722	18.3388	.823	20.9042	.922	23.4188
.524	13.3096	.624	15.8496	.723	18.3642	.824	20.9296	.923	23.4442
.525	13.3350	5/8 .625	15.8750	.724	18.3896	.825	20.9550	.924	23.4696
.526	13.3604	.626	15.9004	.725	18.4150	.826	20.9804	.925	23.4950
.527	13.3858	.627	15.9258	.726	18.4404	.8268	21.0000	.926	23.5204
.528	13.4112	.628	15.9512	.727	18.4658	.827	21.0058	.927	23.5458
.529	13.4366	.629	15.9766	.728	18.4912	.828	21.0312	.928	23.5712
.530	13.4620	.6299	16.0000	.729	18.5166	53/64 .8281	21.0344	.929	23.5966
.531	13.4874	.630	16.0020	.730	18.5420	.829	21.0566	.930	23.6220
17/32 .5312	13.4937	.631	16.0274	.731	18.5674	.830	21.0820	.931	23.6474
.532	13.5128	.632	16.0528	.732	18.5928	.831	21.1074	.932	23.6728
.533	13.5382	.633	16.0782	.733	18.6182	.832	21.1328	.933	23.6982
.534	13.5636	.634	16.1036	.734	18.6436	.833	21.1582	.934	23.7236
.535	13.5890	.635	16.1290	47/64 .7344	18.6532	.834	21.1836	.935	23.7490
.536	13.6144	.636	16.1544	.735	18.6690	.835	21.2090	.936	23.7744
.537	13.6398	.637	16.1798	.736	18.6944	.836	21.2344	.937	23.7998
.538	13.6652	.638	16.2052	.737	18.7198	.837	21.2598	15/16 .9375	23.8125
.539	13.6906	.639	16.2306	.738	18.7452	.838	21.2852	.938	23.8252
.540	13.7160	.640	16.2560	.739	18.7706	.839	21.3106	.939	23.8506
.541	13.7414	41/64 .6406	16.2719	.740	18.7960	.840	21.3360	.940	23.8760
.542	13.7668	.641	16.2814	.741	18.8214	.841	21.3614	.941	23.9014
.543	13.7922	.642	16.3068	.742	18.8468	.842	21.3868	.942	23.9268
.544	13.8176	.643	16.3322	.743	18.8722	.843	21.4122	.943	23.9522
.545	13.8430	.644	16.3576	.744	18.8976	27/32 .8437	21.4312	.944	23.9776
.546	13.8684	.645	16.3830	.745	18.9230	.844	21.4376	.9449	24.0000
35/64 .5469	13.8906	.646	16.4084	.746	18.9484	.845	21.4630	.945	24.0030
.547	13.8938	.647	16.4338	.747	18.9738	.846	21.4884	.946	24.0284
.548	13.9192	.648	16.4592	.748	18.9992	.847	21.5138	.947	24.0538
.549	13.9446	.649	16.4846	.7480	19.0000	.848	21.5392	.948	24.0792
.550	13.9700	.650	16.5100	.749	19.0246	.849	21.5646	.949	24.1046
.551	13.9954	.651	16.5354	3/4 .750	19.0500	.850	21.5900	.950	24.1300
.5512	14.0000	.652	16.5608	.751	19.0754	.851	21.6154	.951	24.1554
.552	14.0208	.653	16.5862	.752	19.1008	.852	21.6408	.952	24.1808
.553	14.0462	.654	16.6116	.753	19.1262	.853	21.6662	.953	24.2062
.554	14.0716	.655	16.6370	.754	19.1516	.854	21.6916	61/64 .9531	24.2094
.555	14.0970	.656	16.6624	.755	19.1770	.855	21.7170	.954	24.2316
.556	14.1224	21/32 .6562	16.6687	.756	19.2024	.856	21.7424	.955	24.2570
.557	14.1478	.657	16.6878	.757	19.2278	.857	21.7678	.956	24.2824
.558	14.1732	.658	16.7132	.758	19.2532	.858	21.7932	.957	24.3078
.559	14.1986	.659	16.7386	.759	19.2786	.859	21.8186	.958	24.3332
.560	14.2240	.660	16.7640	.760	19.3040	55/64 .8594	21.8281	.959	24.3586
.561	14.2494	.661	16.7894	.761	19.3294	.860	21.8440	.960	24.3840
.562	14.2748	.662	16.8148	.762	19.3548	.861	21.8694	.961	24.4094
9/16 .5625	14.2875	.663	16.8402	.763	19.3802	.862	21.8948	.962	24.4348
.563	14.3002	.664	16.8656	.764	19.4056	.863	21.9202	.963	24.4602
.564	14.3256	.665	16.8910	.765	19.4310	.864	21.9456	.964	24.4856
.565	14.3510	.666	16.9164	49/64 .7656	19.4469	.865	21.9710	.965	24.5110
.566	14.3764	.667	16.9418	.766	19.4564	.866	21.9964	.966	24.5364
.567	14.4018	.668	16.9672	.767	19.4818	.8661	22.0000	.967	24.5618
.568	14.4272	.669	16.9926	.768	19.5072	.867	22.0218	.968	24.5872
.569	14.4526	.6693	17.0000	.769	19.5326	.868	22.0472	31/32 .9687	24.6062
.570	14.4780	.670	17.0180	.770	19.5580	.869	22.0726	.969	24.6126
.571	14.5034	.671	17.0434	.771	19.5834	.870	22.0980	.970	24.6380
.572	14.5288	43/64 .6719	17.0656	.772	19.6088	.871	22.1234	.971	24.6634
.573	14.5542	.672	17.0688	.773	19.6342	.872	22.1488	.972	24.6888
.574	14.5796	.673	17.0942	.774	19.6596	.873	22.1742	.973	24.7142
.575	14.6050	.674	17.1196	.775	19.6850	.874	22.1996	.974	24.7396
.576	14.6304	.675	17.1450	.776	19.7104	7/8 .875	22.2250	.975	24.7650
.577	14.6558	.676	17.1704	.777	19.7358	.876	22.2504	.976	24.7904
.578	14.6812	.677	17.1958	.778	19.7612	.877	22.2758	.977	24.8158
37/64 .5781	14.6844	.678	17.2212	.779	19.7866	.878	22.3012	.978	24.8412
.579	14.7066	.679	17.2466	.780	19.8120	.879	22.3266	.979	24.8666
.580	14.7320	.680	17.2720	.781	19.8374	.880	22.3520	.980	24.8920
.581	14.7574	.681	17.2974	25/32 .7812	19.8433	.881	22.3774	.981	24.9174
.582	14.7828	.682	17.3228	.782	19.8628	.882	22.4028	.982	24.9428
.583	14.8082	.683	17.3482	.783	19.8882	.883	22.4282	.983	24.9682
.584	14.8336	.684	17.3736	.784	19.9136	.884	22.4536	.984	24.9936
.585	14.8590	.685	17.3990	.785	19.9390	.885	22.4790	.9843	25.0000
.586	14.8844	.686	17.4244	.786	19.9644	.886	22.5044	63/64 .9844	25.0031
.587	14.9098	.687	17.4498	.787	19.9898	.887	22.5298	.985	25.0190
.588	14.9352	11/16 .6875	17.4625	.7874	20.0000	.888	22.5552	.986	25.0444
.589	14.9606	.688	17.4752	.788	20.0152	.889	22.5806	.987	25.0698
.590	14.9860	.689	17.5006	.789	20.0406	.890	22.6060	.988	25.0952
.5906	15.0000	.690	17.5260	.790	20.0660	57/64 .8906	22.6219	.989	25.1206
.591	15.0114	.691	17.5514	.791	20.0914	.891	22.6314	.990	25.1460
.592	15.0368	.692	17.5768	.792	20.1168	.892	22.6568	.991	25.1714
.593	15.0622	.693	17.6022	.793	20.1422	.893	22.6822	.992	25.1968
19/32 .5937	15.0812	.694	17.6276	.794	20.1676	.894	22.7076	.993	25.2222
.594	15.0876	.695	17.6530	.795	20.1930	.895	22.7330	.994	25.2476
.595	15.1130	.696	17.6784	.796	20.2184	.896	22.7584	.995	25.2730
.596	15.1384	.697	17.7038	51/64 .7969	20.2402	.897	22.7838	.996	25.2984
.597	15.1638	.698	17.7292	.797	20.2438	.898	22.8092	.997	25.3238
.598	15.1892	.699	17.7546	.798	20.2692	.899	22.8346	.998	25.3492
.599	15.2146	.700	17.7800	.799	20.2946	.900	22.8600	.999	25.3746
								1.000	25.4000

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Miles per Hour	Kilometers per Hour (km/h)
25	40
37	60
50	80
60	100
75	120

Now, let's work a problem so that you can practice using the conversion chart. The problem is quite simple: **How many centimeters are in 4 ft?**

First, let's see what you already know. You know you have 4 ft., and after looking at the metric conversion chart (third column) you see that the conversion factor is 30.

The second column in the chart tells you to multiply the number of feet times the conversion factor. So, you multiply 4 ft. x 30 (conversion factor) which gives an answer of 120 centimeters. There are 120 centimeters in 4 ft. That wasn't so painful, was it?

Let's try a second problem. **How many centimeters are in 48 inches?** Multiply 48 x 2.5 (conversion factor). Your answer should be 120 centimeters, so 48 inches converts to 120 centimeters.

Now that you are a whiz at using the conversion chart, let's move on to "Volume." You will see many similarities, including the use of the Metric Conversion Chart.

REVIEW

Base Unit - *Meter* - a little longer than a yard stick - about 39 inches

Units Smaller than a Meter (Divide the Meter)

1/1000th of a meter = one millimeter

1/100th of a meter = one centimeter

Units Larger than a Meter (Multiply the Meter)

1000 times a meter = one kilometer

VOLUME OR CAPACITY

When we want to know how much a container holds (bottle, gas tank, etc.) we want to know the volume or capacity. In the metric system, **volume is measured in liters**. We simply change the term "meter" to "liter." **A Liter (L) is a little more than a quart, about 1/4 cup more**. Soft drinks often come in 2 liter containers.

A **capital L** is used as a symbol for liter because a lower case L closely resembles the number "1." This could be confusing.

The prefixes **milli, centi,** and **kilo** are used, just as they were in the measuring of distances. Thus a **milliliter (mL)** is 1/1000th of a liter. A **centiliter (cL)** is 1/100th of a liter, and a **kiloliter (kL)** is 1000 times a liter. The kiloliter is greater than a liter.

A **milliliter (mL) or cubic centimeter are the same thing.** A milliliter is 1/1000th of a liter. Doctors and pharmacists use milliliters or cubic centimeters to measure medication. **One milliliter holds 1/5 of a teaspoon, so one teaspoon holds five milliliters.**

A can of pop holds 400 milliliters, and a cup of coffee holds 250 milliliters.

A **centiliter** is 1/100th of a liter. It is seldom used in everyday life.

A **kiloliter** is for **extremely large volumes** and is seldom used. A kiloliter is 1000 times a liter.

Let's do a metric problem with volume using your Metric Conversion Chart. The question is: **How many liters are in 2.5 cups?** You know that there are 2.5 cups and, after looking at the Metric Conversion Chart, you know that the conversion factor is 0.24.

Now multiply 2.5 cups x 0.24 and you discover that 2.5 cups = 6 liters. You are catching on, aren't you!

Let's move to WEIGHT. Nothing personal, we are still discussing metric. Don't panic!

REVIEW

Base Unit - *Liter* - a little more than a quart

Units Smaller than a Liter (Divide the Liter)

1/1000th of a liter = one milliliter or one cubic centimeter

1/100th of a liter = one centiliter

Units Larger than a Liter (Multiply the Liter)

1000 times a liter = one kiloliter

WEIGHT

Weight is based on a unit called the **gram (g)** although, because the gram is so small (the weight of a dollar bill), the **kilogram (km)** is used as the **basic unit** of weight in the metric system. **A kilogram equals 1000 grams. A liter of water weighs one kilogram. A kilogram also equals about 2.2 pounds.**

Because the **gram (g)** is so light weight, it is used to measure smaller objects like cereals, boxes of popcorn, or pencils. The gram is sometimes used to provide nutrition information on food products.

A **centigram (cg) 1/100th of a gram**, is seldom used in everyday life. So, we will move on to milligrams.

A **milligram (mg) is 1/1000th of a gram**. Milligrams are used to measure very light items. A milligram weights about the same as a grain of salt. Milligrams (mg) are used by pharmacists to measure medications. Information on vitamins and nutrition are often given in milligrams. Sometimes grams are used to provide the same information.

Let's complete another problem using the metric system and the Metric Conversion Chart. The question is: **How many grams are in 32 ounces?** You know the number of ounces (32) and you find the conversion factor on the Metric Conversion Chart, which is 28.

Multiply 32 ounces x 28 (conversion factor) which tells you that 32 ounces equals about 896 grams.

Here is another question for you. **How many kilograms are in 2 pounds?** Multiply 2 pounds x 0.45 (conversion factor) and you find that 2 pounds = 9 kilograms.

You really are catching on. Now let's move on for a brief look at comparing temperatures using Fahrenheit (F), English system and Celsius (C) Metric system.

REVIEW: WEIGHT

Base Unit: Gram - Weight of two paper clips

Units smaller than a Gram (Divide the Gram)

1/1000th of a gram = milligram

1/100th of a gram = centigram (seldom used)

Units Larger than a Gram (Multiply the Gram)

1000 times a gram = kilogram

TEMPERATURE

Basic Facts Comparing Fahrenheit (F) to Celsius (C)

Boiling Point of Water	*212 F = 100 C*
Body Temperature	*98.6 F = 37 C*
Freezing Point of Water	*32 F = 0 C*

Directions for converting Fahrenheit to Celsius and Celsius to Fahrenheit

To change Fahrenheit to Celsius, **subtract** 32 and multiply that answer by 5/9.

To change Celsius to Fahrenheit, multiply by 9/5 and **add** 32.

Now it is your turn. Following the directions above, what is the equivalent in Celsius of 104^{O}F?

First, subtract 32 from 104. The answer is 72.

Next, multiply 72 x 5/9 like this. 72/1 x 5/9. The answer is 360/9.

Now divide 9 into 360 and you discover that 104^{O}F = 40^{O} C.

Let's do one more problem. Convert 25^{O}C into its Fahrenheit equivalent.

First, multiply 9/5 x 25. The answer is 45.

Next, add 32 to 45. The answer is 77, so 25^{O} C = 77^{O} F.

That was great. You really are getting the hang of the metric system.

Now that you have become moderately acquainted with the metric system, you will have the opportunity to engage in more exercises which will help you to develop confidence in this area of math.

The Metric Conversion Charts and the formulas will also be helpful. Always feel free to ask questions if you need assistance. Someone will be glad to help you. Good luck on your new venture!

SUMMARY

Three Basic Measurements for Metric

Meter for length

Liter for volume

Gram for weight

Three Prefixes Used with Above Measurements

Milli for very small items

Centi for slightly larger items

Kilo for very large items

Join above Prefixes with the Measurements below.

LENGTH

Millimeter (mm)

Centimeter (cm)

Meter (m)

Kilometer (km)

VOLUME

milliliter (ml or mL)
liter (l or L)

WEIGHT

milligram (mg)
gram (g)
kilogram (km)

EXERCISES IN METRIC

ESTIMATIONS

Estimating is an excellent way to learn sizes in metric. Estimating requires that you visualize a standard size and then apply it to another object. In order to estimate, it will be necessary to become familiar with some metric standards: the meter stick (a centimeter/millimeter ruler for shorter distances), a door practically 2 meters high, and an automobile 5 meters long. Then apply those standards to objects you wish to measure by doing the following:

Directions: The first set of exercises relate to **length/distance**. Following the directions below.

1) **Estimate** the measurements of the distances/objects below and record this information in the first set of blanks below.

2) **Measure** the distances/objects below and record your answers in the second set of blanks.

3) **Compare** your estimates with the actual measurements. Now be honest; how close were your estimates to the actual metric measurements?

Exercise 1.

Estimates

A. The distance from the floor to the top of the doorknob is _____ m.

B. A window in this room is _____ m wide and is _____ m above the floor.

C. A door in this room is _____ m high and _____ m wide.

Exercise 1

Measurements.

A. The distance from the floor to the top of the door knob is _____ m.

B. A window in this room is _____ m wide and is _____ m above the floor.

C. A door in this room is _____ m high and _____ m wide.

Exercise 2.

NOTE: Dimensions are **usually** given in **centimeters.** Working with a partner, complete the following exercises.

Directions: Follow the same procedure you did for Exercise 1. Estimate the answers first and record this information in the first set of blanks. Then measure to find the metric answers and record this information in the second set of blanks. Compare your estimates to the actual measurements.

Estimates

A. Find your height in centimeters (cm) and then reverse roles.

B. Measure neck circumference (collar size) _____ cm.

C. Measure head size (hat size) _____ cm.

D. Measure foot length. (This is not the same as shoe size.) _____ cm.

Measurements

A. Find your height in centimeters (cm) and then reverse roles.

B. Measure neck circumference (collar size) _____ cm.

C. Measure head size (hat size) _____ cm.

D. Measure foot length. (This is not the same as shoe size.) _____ cm.

Exercise 3.

Directions: Work with a partner to find the following information. Record your answers in the blanks below.

NOTE: Small dimensions are given in millimeters.

A. Measure the height of capital letters of this manual or of your daily newspaper _____ mm.

B. Measure the dimensions of a wrist watch _____ mm long, _____ mm wide.

The second set of exercises relate to **Volume (Capacity)**.

NOTE: Ordinary size volumes are given in **liters**. A liter (L) is about the size of a plastic soft drink bottle.

Exercises

Directions: Record your answers for questions A. and B. on the blanks provided. For questions C. and D., demonstrate the answers.

A Find out how much liquid in in a 1 L soft drink container by pouring the contents into a 1 L or 500 mL kitchen measuring cup and record your answer. The actual volume of the container is _____L.

Compare your answer to the volume on the container. Does your answer and the figure on the container match? (Be aware that a kitchen measuring cup cannot measure much closer than 25 to 50 mL.)

B. Complete the same exercise with a 2 L container.

C. The average adult male has a lung capacity of 5.8 L (a woman's is 20 - 25% less.) Combine the various bottles to reflect these lung capacities.

D. The average adult (male and female) contains nearly 5 L of blood. As in Exercise C, show how much blood is in an adult's body.

REFERENCES:

Frank, Marjorie, et al **Math Yellow Pages for Students and Teachers**. TN: Incentive Publications, Inc., 1992.

Shoemaker, Robert W. **Metric for Me!** IL: Blackhawk Publications, 1993.

Watson, Fred D. **Going Metric**. IL: Blackhawk Publications, 1991.

APPENDIX A

CHARACTERISTICS OF ADULT LEARNERS

DISPELLING MYTHS

CHARACTERISTICS OF ADULT LEARNERS
Dispelling Myths

Adult learners with low basic skills are sometimes **misperceived** as falling into the same mold: unemployed, poor, extremely vulnerable to others' schemes, lazy, alcohol/drug problems or products of broken homes. While some of these characteristics may be true some of the time, not all of the characteristics are true all of the time. **Let's dispel the myths!**

Adult learners are just like us, for better or worse. The majority of adults with reading difficulties have jobs, though they may be low level ones, and are good employees because they realize that they have little chance of finding other employment. Many adults with reading problems have other desirable talents such as woodworking, sewing, gardening, auto repair and cooking. They will often use these talents to supplement their incomes. These adults often do not realize how talented they are and are surprised when someone pays them a compliment.

Many of the adult learners are married with children, and often want to learn to read when their children enter school They want to share in their children's lives and help them with homework. They want life to be better for their children, especially life in school.

These adults often perceive themselves as dumb because they cannot read, cannot read very well, and/or cannot comprehend what they read. Many of them experienced difficulty in school because of reading problems and because of this difficulty, believe they cannot learn anything worthwhile. Helping adults to increase self-esteem is extremely important.

The adult learners are usually motivated to learn to read. They come because THEY WANT TO MAKE THEIR LIVES, AND THEIR LOVED ONES' LIVES, BETTER! That statement could be made for **any adult** who desires to learn a new skill. That means we have something in common with one another and that means we are not so different after all.

APPENDIX B

TUTORING IN THE WORKPLACE:

GENERAL INFORMATION

TUTORING IN THE WORKPLACE: GENERAL INFORMATION

INTRODUCTION

When preparing to tutor an adult who is part of a workplace literacy program, if possible, find out the purposes of the education program from management's perspective. In other words, why are they offering the workplace literacy program to their employees? The reasons will vary with the company.

Management may want to purchase more sophisticated equipment in order to increase productivity and become more competitive, but realize that current employees would not be able to read and interpret the operation manuals. Employers may desire to initiate cross-training among departments but because of employees' academic and problem solving skills, realize that it is currently impossible. Management may want to begin a "lifelong learning" program but realize this would be a threatening prospect for adults who have minimal academic skills or who have been away from a formal learning situation for a number of years.

As a tutor, it is important for you to be aware of the reasons for the existence of the workplace literacy program. In order to learn this information, ask the coordinator for the tutoring program with which you are affiliated. The coordinator is likely to be aware of the general purpose of the workplace literacy program for a particular business. If you cannot obtain this information from the coordinator, ask him/her if you may speak to the appropriate person in the business who would have this information. Knowing the purpose of the workplace literacy program will help you set goals with your student and link those goals with those of the employers.

BUSINESS EXPECTATIONS

After you determine why the workplace literacy program is offered by a particular company, you will want to determine the expectations they have for their employees' progress. Again, ask the coordinator of your affiliated program for this information. He/She will be able to share this data with you. Some factors to consider are: Do employers expect perfect attendance for tutoring sessions? Are employers paying for tutoring materials? Is tutoring going to take place on company time? If the answers to these questions are "Yes", it will be important to combine goals of the students and the business.

APPENDIX C

FIRST MEETING WITH YOUR STUDENT

FIRST MEETING WITH YOUR STUDENT

The first meeting with your student should be a "get acquainted" session. Get to know one another as people first. Do not treat the first session as the Great Inquisition, however. Be willing to share some things about yourself without dragging all of the skeletons out of the family closet.

Some topics could be family size (number of siblings, aunts, uncles, etc.), where you were born, favorite things you did as a child, favorite foods and television shows, hobbies, etc. If you have snapshots of family members with you, share these with your student. He/She will probably respond in kind.

Discuss the learning goals with your student. If the goals are preset by the workplace, by all means include these in your learning plan, but also include the student's personal goals as much as possible. Additionally, finding out your student's interests and hobbies can provide materials for later lessons.

Decide on a meeting time and place with your student if it is not preplanned by the workplace. Be sure that your student has your name and telephone number in case plans change, or if your student needs help with homework in the future. Verify the spelling of your student's name and the phone number as well.

Ask your student if it is permissible to call him/her at home or work. The answer will vary with each student. Some students do not want family members and/or co-workers to know about their reading difficulties. **Always respect their wishes in this instance!**

Finally, enjoy your student as a fellow adult with the same hopes and dreams you possess: better future for children; job security; job advancement; better home, etc. Remember, the main difference between you and the student is that you were fortunate enough to learn to read when you were in elementary school. Because you learned to read, you have many choices open to you as you go through life. Your student desires the knowledge which will allow him/her the same opportunity to make appropriate life choices. Your instruction will help the student obtain that knowledge. Good luck!

APPENDIX D

PROBLEM SOLVING

The following activities are from the publication, **MORE GAMES TRAINERS PLAY**, by Edward C. Scannell and John W. Newstrom (McGraw-Hill, Inc., 1983). You may find them useful activities when working with your students.

DOT IN A CIRCLE

This task encourages learners to solve the problem using creativity. Show the students a drawing of a circle with a dot in the middle. Tell the students to produce the same figure without lifting their pencils from the paper.

The key to this exercise is as follows:

1. Fold a corner of the paper up toward the middle and place a pencil against the edge of the fold and create a dot adjacent to the fold (and in the middle of the original sheet).

2. Without lifting the pencil, drag the point across the folded corner a few inches and then begin to sweep around the dot to create a circle. As the pencil moves off the folded corner and onto the regular paper surface, unfold it to make room for a complete circle to be drawn.

3. The pencil has remained in constant contact with the paper.

Ask your students these questions after the exercise is completed:

1. What prevented you from seeing the solution immediately? (Problem is impossible to solve. There is no solution.)

2. How did your creativity help to solve this problem? (I saw the problem from a different point of view. I redefined the problem.)

3. How could you use this creativity on the job? In your everyday life? (Answers will vary.)

PRECONCEIVED NOTION (Scannell and Newstrom, 1983)

1. *Pass out a sheet of paper with the word "FLY" printed as shown.*

2. *Tell them to keep the arrow pointing down. Tell them, "If you can read this, raise your hand, but do not tell anyone else."*

3. *Tell those who cannot see the word, FLY, to concentrate on the white spaces rather than the black markings. Most of the group will discover the word now.*

After this activity, ask the group why the word was difficult to find. Lead them to the idea that they were looking at the dark markings rather than the white because they are preconditioned to do this as they read.

Ask them how preconceived notions could interfere with communication. After a brief discussion on this point (2 minutes) tell them that children find the word, "FLY" very quickly because they do not have the preconceived notions that adults do.

THE NINE DOTS PUZZLE - REVISITED

This activity will help students to use their creativity to solve problems.

1. Draw nine dots on a paper, chalk board, or overhead projector.

2. Tell the students to connect all nine dots with four straight lines, without taking their pens or pencils off the paper.

3. If students have seen this done, ask them to connect the dots using three straight lines.

4. After 3-5 minutes, show them the answer, using three or four straight lines.

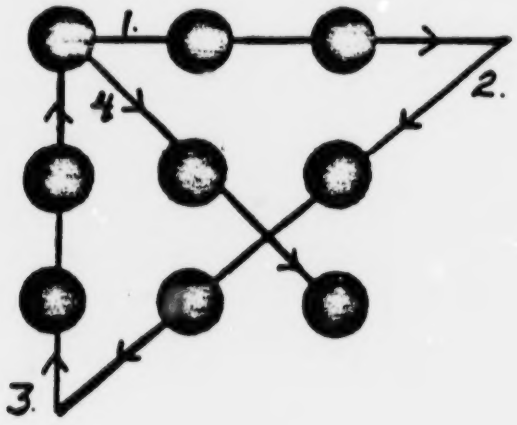
5. Engage the students in the following questions:

   a. Why did you experience difficulty solving this problem? (Too difficult, no possible solution, boxed in.)

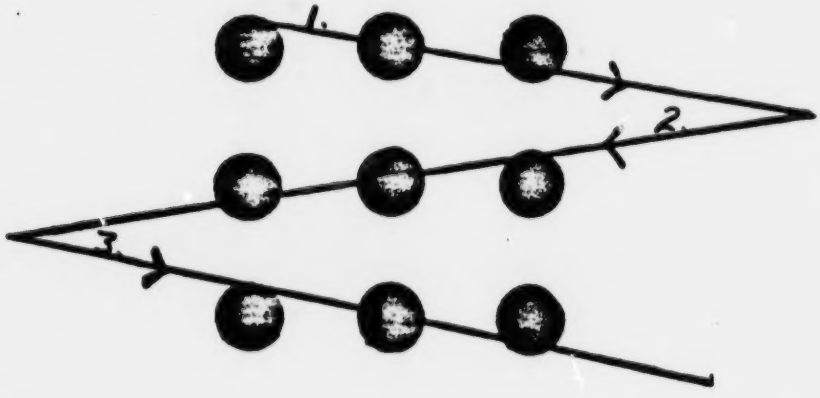
   b. How can we avoid the mindset that a problem is too difficult to solve or that there is no possible solution? (Brainstorm for possible solutions, participate in creative exercises more often so that we get in the habit of using our personal creativity.)

ANSWER SHEET

As a reminder, the most frequently used solution for touching all nine dots with four straight lines is shown here:



To hit all nine dots with three straight lines, try this solution:



Fact vs. Inference (Scannell and Newstrom 1983)

1. *Hold up an ordinary object such as a pen, pencil, notebook, etc. Ask the group to make statements of fact about the object. Record their statements on the overhead.*

2. *After about ten statements have been recorded, tell the group that any statements that go beyond that which can be seen or observed are statements of inference.*

3. *Ask the group what the major differences are between facts and inferences.*

   (Fact: limited to description of what is seen; limited in number of statements that can be made; statements made by a direct observer, if primary.)

   (Inference: go beyond what is seen or observed; can be made without observation; can be made by anyone, observer or not; unlimited in number about anything; possess some degree of probability or uncertainty.)

4. *Ask trainees why it is important to distinguish between fact and inference when gathering and analyzing data during discussion,or any other time.*

   (Danger of misunderstanding and ineffective communication when inference statements are treated as facts.)

5. *Ask trainees if statements of fact and inference should be treated with equal value? (No) Why? Why not?*

Listening with Interest (Scannell and Newstrom, 1983)
Author Unknown

1. *Read a two-three paragraph article from a newspaper or magazine out loud to the group. The article should have no particular interest to the group members.*

2. *After the article has been read, ask them to write down as much as they can about the article.*

3. *Read a second article out loud to the group. This article should be of interest to the group members.*

4. *Ask them to write down as much as they can remember about the article.*

5. *Ask the group to compare the amount written about each article. Then ask them why more was written about the second article.*

6. *Tell trainees that we remember more if we are personally interested in the subject matter. Further explain that we immediately forget 50% of what we hear if we do not do something with the information. Personal interest in subject matter and actively doing something to remember have a definite impact on our listening skills and our ability to remember information.*

APPENDIX E

LISTENING AND SPEAKING

The articles offered in Appendix E may be used when conducting tutor training workshops with your own students(s). The questions which follow each article are generic in nature and may be used with any non-fiction material. You are encouraged to create your own questions about the content of the selections you choose.

SALARIES ARTICLE

Women's Wages Continue to Lag Behind Men's, New Report Shows

Data compiled by Sheila Thompson, Division of Vocational and Career Education, Ohio Department of Education

According to new statistics released by the U.S. Department of Labor, men continue to fare better economically than women, and whites fare better than all other races in the work force. Overall, women earn 76 percent of what men earn, and women continue to earn less than men within the same occupational categories. At the peak of their careers, women earn only 66 percent of what men earn. What is even more significant is that women's earnings decline in comparison to men's as women and men grow older. This information was compiled from statistics cited in Weekly *Earnings of Wage and Salary Workers: Third Quarter 1992*, Bureau of Labor Statistics News, U.S. Department of Labor, October 22, 1992.

Questions for the Job Issue Article:

1. What job issue was discussed?
2. Tell two points about the issue that were covered.
3. Is there any other information you wish to report?
4. Is there other information that you need in order to be more knowledgeable in this area that was not provided in this article?
5. How would this information affect an employer?
6. How would this information affect you personally?

JOB SECURITY/HEALTH

Family Leave Law Will Help U.S. Workers

News for You, February 17, 1992, *Published by* New Readers Press, Syracuse, NY

In 1987 Vicki and George Yandel learned their daughter had cancer. She needed to be treated right away.

Both parents had to take time off from their jobs to care for their daughter. Both parents lost their jobs because of that time off.

That is the sort of problem a new law is trying to deal with. The law is the Family and Medical Leave Act.

President Bill Clinton signed the bill into law last week. The Yandels are grateful for its passage.

"In times of crisis, people shouldn't have to worry about keeping their jobs," Vicki Yandel said. "They shouldn't be forced to choose between their loved ones and jobs they need."

Experts say the law will apply to about 60 percent of all American workers.

That's because workers must be on the job for at least a year before they qualify. They must have worked at least 1,250 hours (or about 25 hours a week).

Also, not all companies have to give the leave. The law applies only to firms with 50 or more workers.

Still, the law will have a big impact on workers' lives. It allows workers up to 12 weeks unpaid leave for:

- the birth of a child,
- an adoption,
- care of a child, spouse or parent with a serious health problem,
- their own serious health problem if it gets in the way of doing their job.

Returning workers must be given their old jobs back or jobs of equal value.

"It's going to take a lot of stress off those who need to take time away from work," said Helen Morgan of San Jose, California. Her company replaced her when she took time off to give birth.

Barbara Otto is the spokeswoman for the National Association of Working Women. "This is just the first step in family protection," she said. "This isn't going to make a big difference to low-income families because they can't afford to take (unpaid) leave."

Questions for the Job Issue Article:

1. What job issue was discussed?
2. Tell two points about the issue that were covered.
3. Is there any other information you wish to report?
4. Is there other information that you need in order to be more knowledgeable in this area that was not provided in this article?
5. How would this information affect an employer?
6. How would this information affect you personally?

APPENDIX F

SECTION III

WRITING

Extension Activities

Ask your students where they are experiencing the most success and most dismal failures with telephone messages. Ask the students to do the following: pick one message which was particularly good and timely; record it on a telephone message pad; write one message which was particularly garbled; problem solve to correct this message.

Provide an example of a particularly clear message which is self explanatory. Ask the students to role play and call other employees to pass on the information. The tutors can act as the recorders. Ask the students to read the messages and make any necessary changes; correct any grammar or spelling of which they are unsure by using the dictionary and referring to the original message.

Ask students to discuss messages they have received at home from children, spouses or friends. Write a telephone message for a child or friend who is a visual learner.

SECTION III: WRITING .... MEMOS

Scenario - Recently, the Human Resource department manager of a small company of 50 employees has noticed that most people are arriving at work at 7:40 AM. Work begins at 7:30 AM and people are expected to arrive prior to that time.

Extension Activities

Use the above scenario with students. Depending on the abilities of the students, tutors might write down what the students dictate, or the students might write part of the exercise, with the tutors providing assistance with more difficult sections. If the students are sufficiently advanced, they can complete the whole exercise with the tutors as reference persons.

Ask the students to read the memo. Pick out several key vocabulary words and spelling words. Ask the students to write them on index cards for later review.

Suggest that the writers create another memo on this topic which would not be sensitive to employees. Discuss the negative environment which inappropriate memos can create.

Bring in a garbled memo which is too lengthy and not clear. Read the memo with the students in duet reading. Map the main ideas of the memo. Rewrite the memo with clarity and brevity.

Extension Activities

Request students to write a letter to the head of a department, requesting consideration as an applicant for a new opening. Use block style and then another style. If the tutors and students have access to a computer, have the students enter the letters on a word processing program and use spell check to correct spelling errors.

Tutors bring in several different newspapers' versions of "Letters to the Editor." Ask your students if there are any issues that they would like to write about. Request your students to write letters to the editor which they may want to send or not send to the newspaper. Request students to write the first letter using a business style. Then ask the students to write informal letters to the editor. If students do not have a burning issue they want to write about, they can pick one of the topics that appeals to them from the "Letters to the Editor" section.

APPENDIX G.

SECTION IV: DISCUSSION AND DEBATE

SECTION IV: DISCUSSION AND DEBATE EXTENSION ACTIVITIES

Extension Activities

Read the National Issues Forums Introduction in "Regaining the Competitive Edge," Abridged Edition, by using Duet Reading. After each paragraph, discuss words that are unfamiliar or difficult. Create a glossary of these words by writing them on individual index cards with the word. Write the word in a meaningful sentence on one side, and the actual meaning of the word on the other side. Ask the students to sum up each paragraph using their own words and own experiences. The tutors might, if appropriate, write down the students' summaries. Then the students may read their summaries.

The students and tutors might pick out key quotes and stories and cartoons. Provide the students with the opportunity to discuss the cartoons and stories. The tutors and students may want to write their own cartoon or important quotes.

Students can present a strength or weakness of a choice and practice public speaking.

Students might write a story about how they or their families/friends have been affected by the changing economy.

APPENDIX H.

ASSESSMENT TESTS

SECTION IV: EMPLOYEE ASSESSMENT TESTS

As a tutor with students from a workplace setting, you might deal with employees who have taken company-wide assessment tests. Frequently, companies will use national assessment tests to determine the skill levels of employees and to plan future training requirements. Sometimes the results of the tests are totally confidential, and only employees have their individual test scores; other times, the human resource department and company managers may have the individual test results of all employees.

With increased emphasis on training in a changing work environment, employers have learned through experience that basic skill levels in mathematics, reading, writing, listening and speaking are necessary for higher training. In addition, skills such as learning how to learn, working as a team member and group problem solving are considered important. Personal growth which includes improved self-esteem, motivation and goal setting is important as employees adjust to changes.

Before implementing a company-wide training program, many employers decide they want all employees to take a standardized norm referenced test. What does this mean? A standardized test follows a defined set of conditions. People read the same material, answer the same questions and are allotted the same amount of time for the test. The tests are scored consistently. A norm referenced test refers to a test that has been normed on a certain group of people, frequently, younger children. For many standardized norm referenced tests, adults are compared to students in school and are given a grade equivalent score like 6th grade 4 months. This score indicates that the person taking the test has received a score similar to students who have been in the sixth grade for four months. There are several problems with this type of score: it is demeaning to an adult; adults do not want to think of themselves as being in elementary or middle school; it does not give credit to adults for skills they have developed and are successfully using.

There are standardized norm referenced tests that have been developed which are more appropriate for adults, some which are even competency based. If your students want to share their scores and have questions about the test, find out which test has been used. Then contact your local adult basic and literacy education program to find out more about the test. If they do not have the information, try your local community college.

If the test has been locally developed by the company or is criterion referenced (based on a fixed course with stated objectives, e.g. a course on fractions and mastering addition with fractions), find out if you can see the test or get a copy of it.

We all need to remind ourselves that tests simply are assessing our performance on a given day, at a given time, on specific content areas. Test results can change; we all have good days and bad days. With practice and learning, we can significantly improve both our test taking skills and our knowledge of the content area.

APPENDIX I.

TASK ANALYSIS

LITERACY TASK ANALYSIS

With increased job requirements, management and unions have become more aware of employee basic skill deficits. Literacy task analysis is a method for determining the basic skills required to perform a job. Literacy task analysis also provides the workplace context for the training curriculum.

Your students' company personnel may have conducted a literacy task analysis before committing to a training program for basic skills. These task analyses can be extremely useful for gauging skills required for your students' jobs. They can also provide a framework for many of your lessons.

After several sessions with your students, you might ask if a literacy task analysis has been completed for their new job requirements. Are there specific task descriptions for their jobs? Are their specific task details clearly stating the types of basic skills required to complete the tasks? If, as the tutor, you feel that these questions might be too imposing, you might just ask questions about your students' jobs. What kind of skills do you need to do your job? What are some of the most important tasks that you do? What are the hardest tasks for you? What tasks do you do really well? After you have established a comfortable working relationship and have discussed areas of the job, you might then want to ask about literacy task analyses and job descriptions.

There are many methods established for implementing a literacy task analysis. No matter what process has been used, one of the first questions to ask is "Why was a literacy task analysis performed?" Is the company going through a transition where technical requirements for jobs are increasing? Are workers dissatisfied about the company's record on internal promotions? Are most of the new jobs going to people outside of the company? Is the company implementing a training program for improving basic skills? Are they using the results of the literacy task analysis for development of a training curriculum? Is the company interested in cross-training personnel for different positions? The answers to these questions will probably help you understand the method and framework used for the literacy task analysis.

A literacy task analysis can outline and prioritize basic skills required for a job. Anthony Carnevale in Workplace Basics Training Manual defines the breakdown of a job as follows:

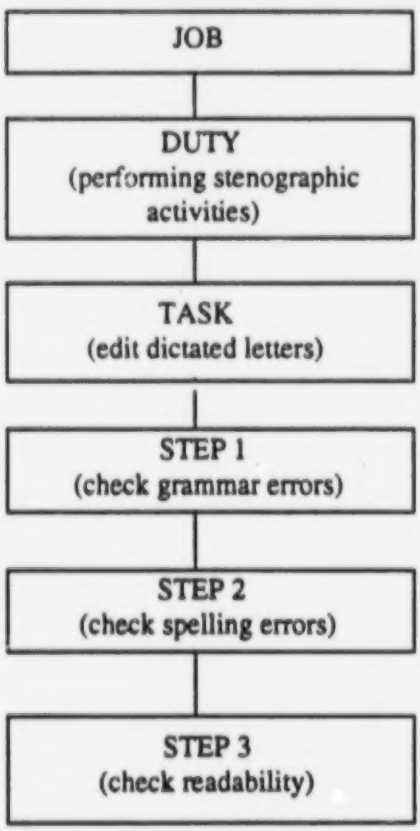
"A job is a specific position requiring the performance of specific tasks.

"A duty is an arbitrary clustering of related tasks into broad functional areas of responsibility.

A task is a work activity that is discrete, observable, performed within a limited period of time, and leads to a product, service or decision.

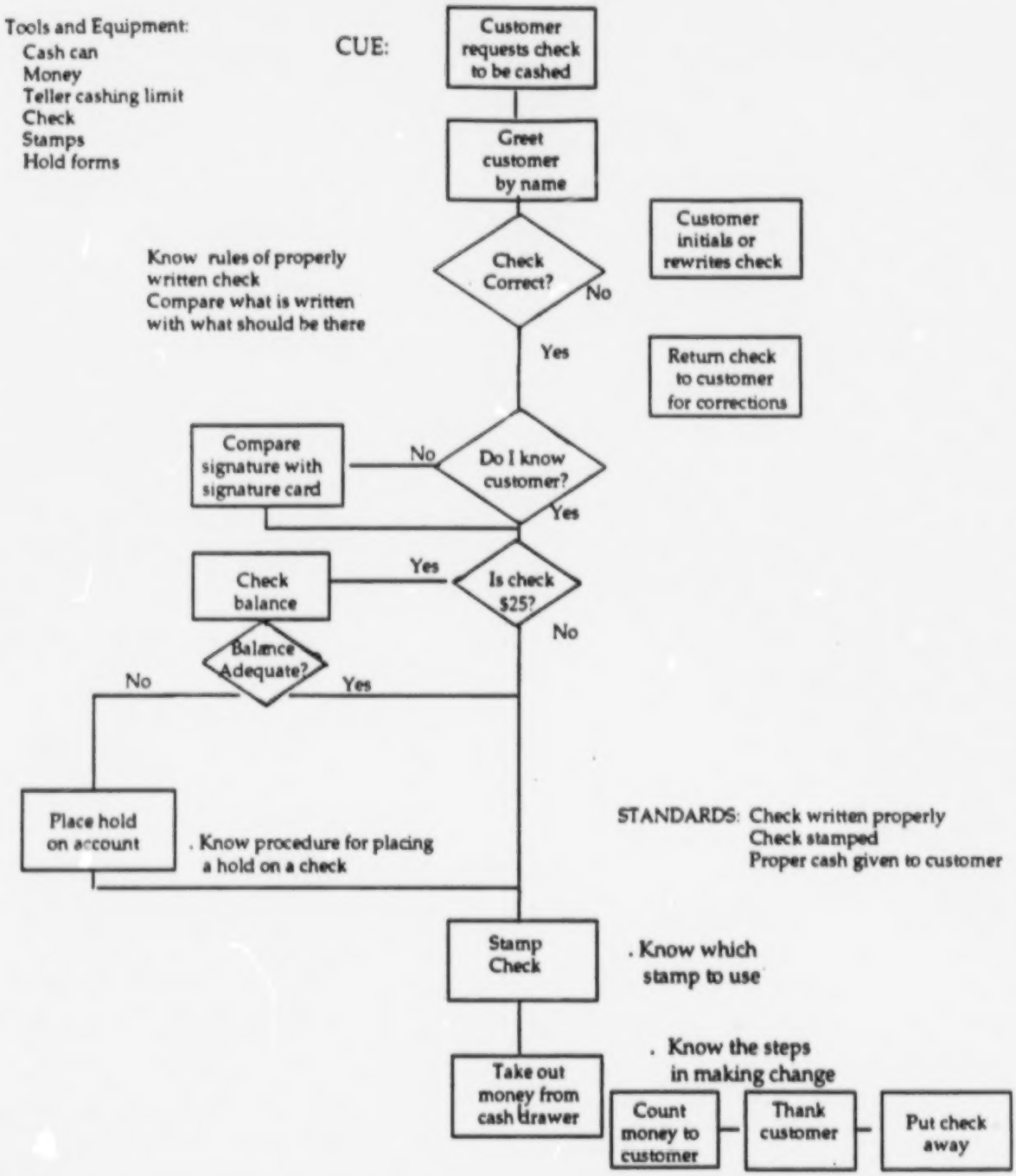
Two or more steps make up a task. Each step alone would not result in a product, service, or decision." p.4.5

Example: Job Components p. 4.5 (adapted from Carnevale, Anthony Workplace Basics, (1990), Jossey-Bass, Inc., Publishers, CA)



After a job is broken down into tasks and steps, task detailing, which explains how a task is completed, should be finalized. This information can include necessary materials, sequence of steps, co-workers who participate. Then the type of skills needed to complete the tasks can be outlined. Carnevale (1990) provides a useful Task-detailing flow chart. p. 4.14.

Figure 4. Task-Detailing Flow Chart



Jorie W. Phillipi in "How to Design Instruction: From Literacy Task Analyses to Curriculum" provides another example of a Literacy Task Analysis (p. 240). (Refer to p. 146.) Phillipi, Jorie **In Basic Skills For the Workplace,** Maurice W. Taylor (ed.), Toronto, Ontario, Canada, 1991. Culture Concepts, Inc.

Figure No. 1

LITERACY TASK ANALYSIS

Job Title: Truck Driver

Job Task: Vehicle Inspection

Subtasks	Literary Skill Application
1. **Cold Check** - Before starting, check oil, water, antifreeze, belts & hoses (condition). Check tires for inflation.	1.1 Following sequential procedural directions. 1.2 Recognizing defects, i.e., compare/ contrast; drawing conclusions. 1.3 Knowledge of equipment operating procedures, i.e., cause/effect.
2. **Running Check - walk around.** Turn on engine. Check lights, body, windshield, (diesel/air brakes). Check for leaks on ground. Recheck hoses for leaks.	2.1 Following sequential procedural directions. 2.2 Recognizing d 2.3 Knowledge of procedures, i. 2.4 Predicting out
3. **Running Check - inside cabin.** Check for debris, fire extinguisher, first aid, flares ("fuses"). Check gauges.	3.1 Knowledge of safety regulations. 3.2 Reading gauges, i.e., interpreting increments; knowledge of acceptable ranges. 3.3 Following sequential procedural directions. 3.4 Recognizing defects or missing equipment, i.e., drawing conclusions; predicting outcomes.
4. Fill out Vehicle Check List form. Write summary statements for any problems found or requested repairs.	4.1 Reading skills, i.e., comprehension, word recognition. 4.2 Knowledge of technical vocabulary. 4.3 Chart Reading. 4.4 Skimming/scanning for headings. 4.5 Entering information accurately onto a form, i.e., translation to format; locating areas on a form. 4.6 Writing summary statements.
5. Act on results of checks by deciding whether vehicle is safe to load and use for cargo transport or should remain in yard for immediate minor repairs or extensive major repairs. Checks with garage to determine availability of service time.	5.1 Predicting outcomes. 5.2 Prioritizing actions. 5.3 Using multiple sources of information. 5.4 Decision making.
6. Load equipment and cargo. Check cargo area for compliance with safety regulations.	6.1 Spatial estimation. 6.2 Knowledge of safety regulations. 6.3 Recognizing hazards, violations, i.e., compare/contrast; cause/effect; drawing conclusions; predicting outcomes. 6.4 Following procedural directions.

Subsets of skill applications provide division points for planning units of instruction.

150

One of the more effective ways to find out how job tasks are performed and what job skills are necessary is through interviewing and observing very competent employees on the job. By getting them to talk through each step of each task, the literacy task analyst can get very useful information for the actual curriculum. Unfortunately, a lot of literacy task analyses side step this process.

In the attempt to clearly delineate each job task and subsequent steps, the dynamic aspect of jobs can be forgotten. Frequently, tasks are done simultaneously. As we all know, how tasks are planned and how they are actually carried out on a given day can vary significantly.

Literacy Task Analyses provides useful information for curriculum development. With increased emphasis on team work, total reliance on a contextual curriculum which emphasizes individual performance is probably not advisable. For many people, working as a team and the rhythm of the day, are very important. Performing tasks in isolation or just focusing on one specific aspect of a task can detract from total job performance.

The curriculum also needs to reflect the personal goals of the individuals. Some workplace literacy consultants emphasize the importance of using only the job context for practicing skills so the transference of knowledge can be direct. However, as tutors of adults learners, we know that practice in different areas tends to improve skills, and personal goals are critical to the success of the learning process.

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Carnevale, Anthony P. et al **Workplace Basics Training Manual**, CA: Jossey-Bass Publishers, 1990

Gowen, Sheryl Greenwood **The Politics of WorkPlace Literacy. A Case Study**, NY: Teachers College Press, 1992

Phillipi, Jorie. W. "How to Design Instruction: From Literacy Task Analyses to Curriculum," Chapter 7, in Taylor, Maurice C. et al, **Basic Skills for the Workplace**, Toronto, Ontario, Canada: Culture Concepts, 1990

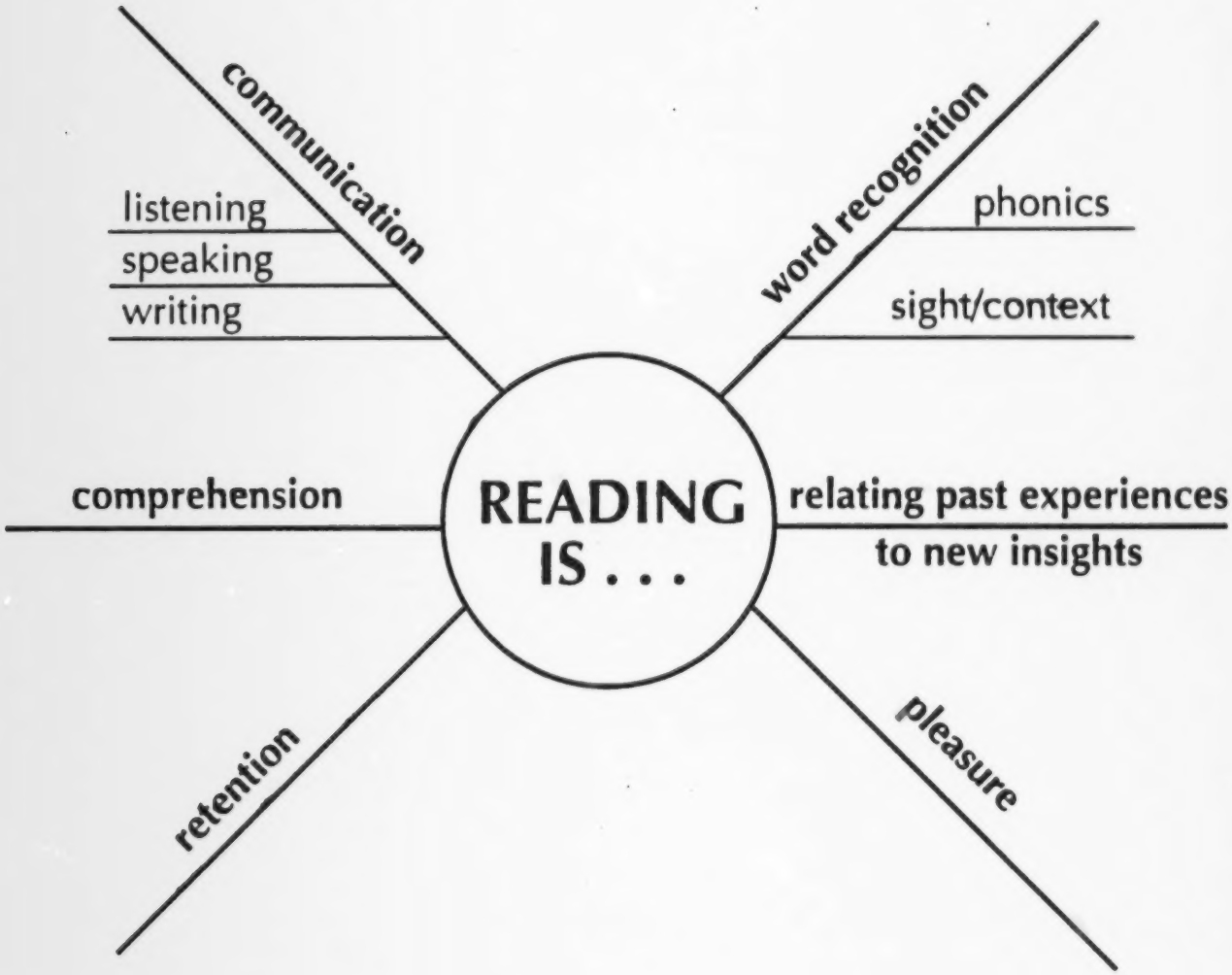
Taylor, Maurice C. and Lewe, Glenda "How to Plan And Conduct a Literacy Task Analysis, Chapter 6, in Taylor, Maurice C. et al, **Basic Skills for the WorkPlace**, Toronto, Ontario, Canada: Culture Concepts, 1990.

SUPPLEMENTARY MATERIALS FOR THE WORKPLACE LITERACY TUTOR TRAINING MANUAL FROM MIAMI VALLEY LITERACY COALITION BASIC LITERACY TUTOR TRAINING WORKSHOP MANUAL

Section 5

The Reading Process

What is Reading?



A New Definition of Reading

Reading is
the process of constructing meaning (Reading)
through the dynamic interaction
among the reader's existing knowledge, (Reader)
the information suggested by the written language, (Text)
and the context of the reading situation. (Context)

In other words:

Reader + Text + Context = Reading

The ultimate goal of reading instruction is the development of a reader who can flexibly and independently process written language for meaning.

Meaning that is constructed by a reader is dependent to a large extent on the relationship between the author's purpose for writing the text and the reader's purpose for reading. A reader will construct different meaning about nature from a poem, a textbook, or a novel.

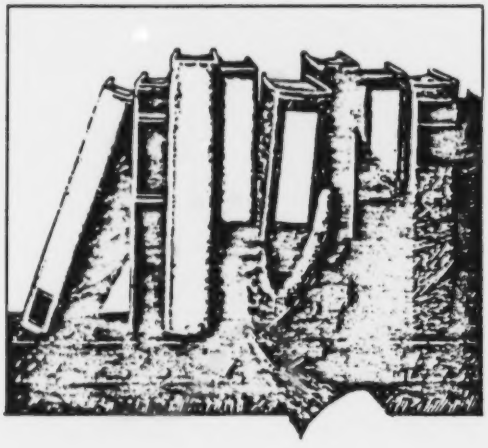
The reader's ability to construct meaning about a particular topic is dependent upon the reader's background knowledge of that topic. A good reader activates background knowledge of a topic.

Background knowledge helps the reader to understand the passage. *What do I know?* It also sets purpose for reading. *What do I want to know?* Activating the reader's thinking helps the reader connect new information to information already possessed.

The psychological, physical, social, cultural, and linguistic characteristics of the reader interact with the reading task to influence the process. Understanding how adults learn is important in helping them learn how to read. **Adults bring a lifetime of experience to the learning situation.**

Source: Robson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Developing Reading Skills



- A skilled reader learns to reason about written material using knowledge from everyday life.
- A skilled reader has developed the basic process in reading to the point where reading focuses on meaning, not on mechanics.
- A skilled reader is able to select and change reading strategies depending upon the purpose for reading, the nature of material, and level of understanding.
- A skilled reader is motivated to making reading a lifelong pursuit.
- A skilled reader has a self-concept of being a good reader.

To help someone become a skilled reader, instruction must provide a student with knowledge about different situations and the ability to apply this knowledge in a flexible manner. As reading ability increases, the reader is constantly refining the way text is approached. The reader becomes more knowledgeable in selecting strategies for achieving reading goals.

To help adults become skilled readers, a multisensory method is usually best. The instruction is presented in several modalities. Frequently, kinesthetic (movement) and tactile (touch) stimulations are used along with visual and auditory modalities.

Source: Robson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Section 7

Learning Styles

Items taken from the perception section of the:

Reading Style Inventory® (Adult)

by Marie Carbo, Ed.D.

1 A) It's easy for me to sound out new words.
B) It's hard for me to sound out new words.

2 A) When I look at words, I often mix up letters like "b" and "d."
B) When I look at words, I almost never mix up letters like "b" and "d."

3 A) If I'm not sure how to spell a word, if helps me when I write it a few times.
B) If I'm not sure how to spell a word, it doesn't help me when I write it a few times.

4 A) If I stop to sound out new words, I often forget what I'm reading.
B) If I stop to sound out new words, I don't forget what I'm reading.

5 A) If I see a phone number, it's easy for me to remember it.
B) If I see a phone number, it's hard for me to remember it.

6 A) When I write words, sometimes I mix up the letters.
B) When I write words, I almost never mix up the letters.

7 A) When I get up and move, it helps me to think better.
B) When I get up and move, it doesn't help me to think better.

8 A) It's hard for me to remember the directions that someone tells me.
B) It's easy for me to remember the directions that someone tells me.

9 A) Dialing a phone number helps me to remember it.
B) Dialing a phone number doesn't help me to remember it.

10 A) I almost never lose my place on the page when I'm reading.
B) I usually lose my place on the page when I'm reading.

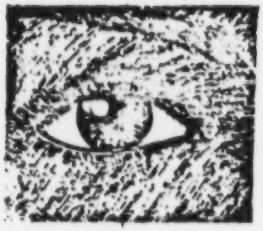
11 A) It's easy for me to remember rules about sounding out words.
B) It's hard for me to remember rules about sounding out words.

12 A) I like to do things like building something, walking or exercising.
B) I don't like to do things like building something, walking or exercising.

AUDITORY STRENGTHS	VISUAL STRENGTHS	TACTUAL/KINESTHETIC PREFERENCES
1A	2B	3A
4B	5A	7A
8B	6B	9A
11A	10A	12A

Source: Carbo, Marie. *Combining the Power of Reading Styles and Whole Language*. Roslyn Heights, NY: National Reading Styles Institute, Inc., 1991.

Styles of Learning



Visually Oriented Learners:

- Recall words after seeing them a few times.
- Prefer directions that are written.
- Can concentrate on visual tasks despite visual distractions.
- Remember and understand words accompanied by pictures and graphs.
- Discriminate between letters that look alike (m/n) and words that look alike (full/fill).
- Do not confuse the order of letters (stop/spot).

Implications for tutoring:

For a visual student, use written instructions, not just oral ones. A Language Experience Story may work better than phonics. Use pictures and charts if possible and make pictures out of words or letters.

Auditory Learners:

- Recall words after hearing them a few times.
- Prefer oral instructions.
- Can concentrate on listening despite auditory distractions.
- Use appropriate vocabulary and sentence structure.
- Discriminate between words that sound alike (cat/cot) and letters that sound alike (t/d).
- Blend sounds quickly to form words.
- Can retain the story line while sounding out words.

Implications for tutoring:

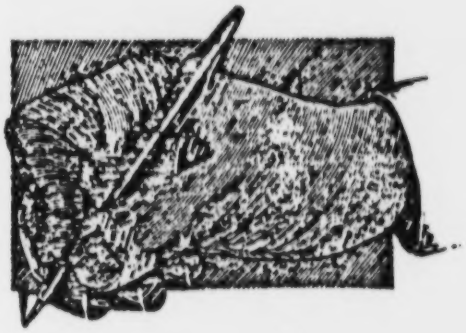
Use tapes, radio, discussions, and verbal explanations with an auditory student. Read aloud to student. Tapes of words may be better than flash cards. Echo reading may help. Have student listen to a tape of a book while reading it. Give oral instructions, not just written ones.

Kinesthetic Learners:

- Recall words after writing them a few times.
- Move smoothly, rhythmically, and freely.
- Recall words from signs seen on a trip.
- Recall words more easily when walking or pacing.
- Remember the feelings of a story better than the details.

Tactile Learners:

- Recall words after typing them a few times.
- Excel at crafts such as sewing or making models.
- Hold a pen or pencil correctly.
- Write legibly and proportionately.
- Recall words after touching the object they represent or using them in a game.



Implications for tutoring:

Students with strong tactile and kinesthetic skills may benefit by using Scrabble tiles, alphabet cut-outs (made of wood, sandpaper, or textured material) or lettered dice to make words. Games that let the student identify the answer by manipulating, rather than saying it, may help. Computers and the Experience Story are excellent tools.

Source: Robeson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Section 8

Special Reader Problems

Special Reader Problems

Some students have special needs when learning to read. They may have hearing, vision, or learning problems, or they may be learning English as a second language. You can use the same techniques with special reading students that you use with other students.

Students With Hearing Problems

Symptoms:

- Talking loudly
- Asking you to repeat
- Frequently not "remembering" what you said
- Misunderstanding you
- Turning one ear toward you when you talk
- Not hearing you (when not looking directly at you)

If you suspect your student has a hearing problem:

- Encourage the student to have hearing checked
- Enunciate clearly
- Speak loudly, but don't yell
- Sit on the student's "good side"
- Make sure the student is aware when you start to speak
- Ask the student to repeat things back to you

Students With Vision Problems

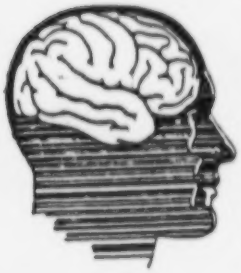
Symptoms:

- Squinting
- Holding the book too close
- Bending low over the table
- Holding the book far away
- Headache
- Eye fatigue
- Inability to read small print

If you think your student may have a vision problem:

- Encourage the student to have vision checked
- Ask the student to tell you when the print is too small to read
- Work in a well lit area
- Encourage the student to position the book where it can be seen best
- Check with the library for large-print books

Source: Rahoon, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors*. 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.



Students With Learning Disabilities

A learning disability is a learning problem associated with the way the brain processes information.

Students with learning disabilities may experience difficulty:

- Staying on task
- Keeping their place on the page
- Reversing letters or sequencing
- Understanding what is read
- Recalling what is read
- Learning and remembering sight words
- Time sequencing (in what order do things occur)
- Forming letters when writing
- Communicating in a written form

People with learning disabilities have trouble seeing letters correctly, hearing sounds correctly, or writing correctly even though their eyes, ears, and muscles work fine. ***Students with learning disabilities just learn differently.***

People with learning disabilities usually display average or above average intelligence. They often have enviable talents in other areas.

Dyslexia

Dyslexia is a type of learning disability. True dyslexia is not curable, but it is manageable. A dyslexic person can learn to read in spite of seeing things scrambled.

A person with dyslexia may see:

Saw the bog unber the huose?

instead of:

Was the dog under the house?

Some dyslexics have been very successful: Thomas Edison, Albert Einstein, General Patton, Rodin, Woodrow Wilson, Winston Churchill, Nelson Rockefeller, Hans Christian Anderson, and Leonardo da Vinci.

When working with dyslexic students, use all avenues of learning.

- Focus on the student's strengths to compensate for the weaknesses.
- Focus on comprehension. True dyslexics learn to cope by noticing when something doesn't make sense. Then they simply reread.
- Focus on a small section of text. It may be necessary to cover up all but the line or section you are working on to reduce visual distraction.
- Focus on meeting the student's needs. It may be necessary to rewrite the materials being used into a format better suited to the student.

Check with your literacy coordinator for other resources.

Source: Robeson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Section 9

Whole Language Approach

What Is Whole Language?

"A whole-language program is one in which reading, writing, listening and talking are integrated in a stimulating, natural language-learning environment."

Andrea Butler, 1987

The Emphasis Is on "Real"

Whole-language teachers create stimulating environments that support and nurture a child's natural desire to learn language. Real purposes for reading and writing, and real audiences are provided consistently.

Skills Versus Strategies

Generally, children are not taught skills out of context. The emphasis is on the teaching of strategies. As Don Holdaway notes:

> The major difference, then, between "skills" teaching and "strategy" teaching concerns the presence or absence of self-direction on the part of the learner. In skills teaching the teacher tells the learner what to do and then "corrects" or "marks" the response. In strategy teaching the teacher induces the learner to behave in an appropriate way and encourages the learner to confirm or correct his (her) own responses—*the teacher does not usurp the control which is crucial to mastering a strategy.*

Don Holdaway, *The Foundations of Literacy*, Portsmouth, NH: Heinemann Educ. Books, 1987.

Opportunities for Sharing

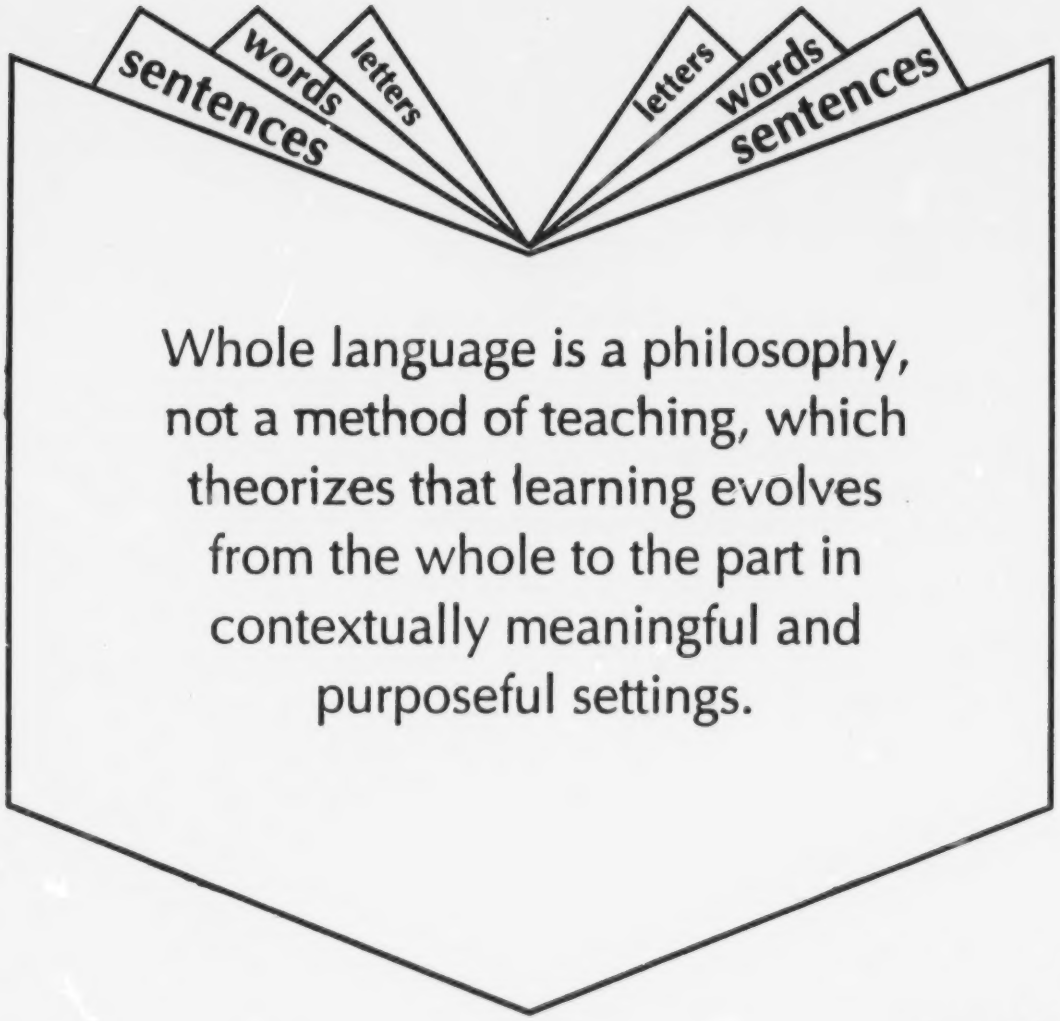
Sharing is important. Children may perform by reading a favorite part of a story, a report, or a final draft of a story. During these times, teachers model attentive behavior, ask intelligent questions and provide constructive feedback.

Content Area Reading and Writing

Teachers need to model how to write in each curriculum area. They do this by immersing students in many different examples of writing, and then noting the characteristics of the various types of writing.

Source: Carbo, Marie. *Combining the Power of Reading Styles and Whole Language*. Roslyn Heights, NY: National Reading Styles Institute, Inc., 1991.

Definition of Whole Language


sentences
words
letters
letters
words
sentences
Whole language is a philosophy, not a method of teaching, which theorizes that learning evolves from the whole to the part in contextually meaningful and purposeful settings.

Donald Keefe
and
Valerie Meyer

Assumptions
of whole language

Learning is . . .

✓ taking risks/experimentation

✓ student centered

✓ social and collaborative

✓ relating new information to prior knowledge

✓ making choices and decisions

✓ dealing with real purposes and situations

Strategies
of Whole Language

Shared Reading — Oral Reading

Modeled Reading
Duet
Independent

Guided Reading — Silent Reading for Comprehension

Pre-reading
Reading
Post-reading

Writing

Language Experience Stories
Process Writing

Extended Activities — Reading and Writing

Sustained Silent Reading

Value
of Reading Aloud

✓ It plants the desire to read.

✓ It develops a student's listening vocabulary. (Listen to 10,000 words; maybe read 300 words.)

✓ It increases social relationships and friendships.

✓ It increases attention span as it is calming.

✓ It adds meaning to our lives.

Source: The Read Aloud Handbook, by Jim Trelease

Section 10

Whole Language Reading Strategies

Whole Language Reading Strategies

Reading Together

Rationale:

1. Increases student's confidence when reading aloud.
2. Helps to impress the words into the student's memory.

Materials:

Text that is of interest to student and is near the instructional level.

Procedure:

1. Tutor sits to the right of the student.
2. Tutor and student read together.

The tutor should read one or two syllables ahead of the student.

Echo Reading

Rationale:

1. Increases sight word recognition.
2. Increases confidence reading aloud.
3. Models phrasing and pronunciation.

(This strategy is good for ESL students and beginning students.)

Materials:

Reading passage at student's instructional level.

Procedure:

1. Tutor reads a sentence from the passage.
2. Student reads the same sentence imitating the tutor's stress and intonation.

Source: Robeson, Ed, Marsha DeVergilio, and Donna DeBatto. *LITSTART: Literacy Strategies for Adult Reading Tutors*. 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Taped Readings

Rationale:

1. Allows the student to work independently between sessions.
2. Increases sight word mastery.

Materials:

tape recorder
blank tape
reading passage that is of interest to student

Procedure:

1. Tutor makes a tape of reading passage.
2. Student listens to the tape while following the reading passage.
3. Student reads aloud slightly faster than tape. The tape becomes an echo.
4. The student reads the passage without the tape.
5. Student can repeat steps 2 through 4 as needed.

"I Think That..."

Rationale:

Student learns how a successful reader interacts with text.

Materials:

Passage at student's instructional level.

Note: Some of the passage may be difficult.

Procedure:

1. The tutor reads part of the selected passage aloud.
2. Tutor then processes the passage aloud for the student by:

- Making predictions:
  "I think that _____ will probably happen . . ."
- Describing mental images:
  "When I read this, it makes me think of . . . "
- Showing when to reread or ask questions:
  ". . . This just doesn't make sense."

Source: Robson, Ed, Marsha DeVergilio, and Donna DeBatte. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

"Just Hummin' Along"

Rationale:

1. Provides reading practice by presenting words in a meaningful context. Student is able to form a bridge between the music and the text.
2. Allows student to hear colloquial language. (Excellent strategy for use with ESL students.)

Materials:

cassette tapes or records
player for tapes or records
sheet music or song book of lyrics

Procedure:

1. Have student listen to the tape or record.
2. Student follows along with a written copy of the song.

This can be repeated as often as necessary until student can read sheet music without tape or record.

Memories, like the corners of my mind
Misty watercolor memories
Of the way we were
Scattered pictures
Of the smiles we left behind
Smiles we gave to one another
For the way we were

From the Columbia Picture, Rastar Production, "*The Way We Were*" 1973.

"Tell Me What You've Read"

Rationale:

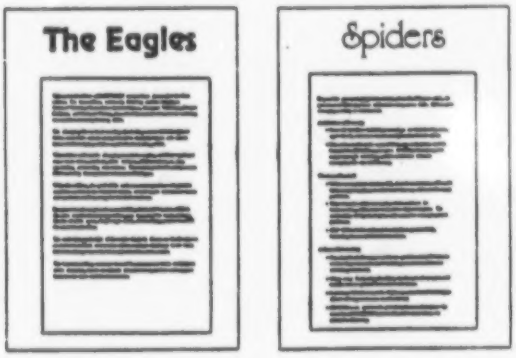
1. Develops student's ability to read silently for meaning.
2. Increases motivation to read independently.

Materials:

Two passages at the student's independent level.

Procedure:

1. Tutor and student independently read a selected passage.
2. Tutor and student share the contents of passages read.
3. Tutor and student trade passages to read.
4. Tutor and student share ideas on the second reading.



Source: Robeon, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors*. 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Summary Reading

Rationale:

Summarizing is a key strategy and a necessary study skill for good readers.

Materials:

Text appropriate for student's instructional/ independent level and interest.

Procedure:

1. Tutor and student both read short passage silently.
2. Tutor summarizes or explains the text by saying:

   "To me the passage seems to be saying..."

   "What do you think?"

   "I would like to rename the passage..."

   "What would you call it?"

Questioning Partners

Rationale:

1. Models reading for a purpose using prediction.
2. Allows student to self-assess comprehension.

Materials:

Text that is of interest to the student and at the student's instructional level.

Procedure:

1. Tutor and student each silently read the same passage.
2. Tutor asks student a question about the passage.
3. Student then asks tutor a question.
4. Tutor models questioning strategies such as prediction or inference.

> Joe and Harry like to play baseball. They play every day after school in the empty lot next to their apartment building. Joe plays shortstop. Harry is the catcher. The other players on the team live in the same apartment building.

Student: Where do they play baseball? (**Fact**)

Tutor: How old do you think Joe and Harry are? (**Inference**)

Source: Robson, Ed, Marsha DeVergilio, and Donna DeBetta. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

S Q 4 R

(Survey, Question, Read, Recite, Review, Write)

Rationale:

Study plan to help the student become a more effective reader. Requires the student to:

- Ask questions.
- Make predictions.
- Set purpose.
- Check comprehension.

Materials:

Textbook written at instructional level.

Procedure:

1. **Survey:**
   a. Look over the title and definitions.
   b. What do I already know or want to know?
   c. Look at pictures or graphs.
   d. Read summary or introduction.
2. **Question:**
   a. Formulate questions during survey.
   b. Write down words that are new and guess at meaning from text.
3. **Read Actively:** Read to find answers.
4. **Recite:**
   a. Put passage in your own words.
   b. Answer questions.
5. **Review:** Reread to find unanswered questions.
6. **Write:** Write summary or outline, etc.

Story Map

Rationale:

Informs student how fiction stories are constructed.

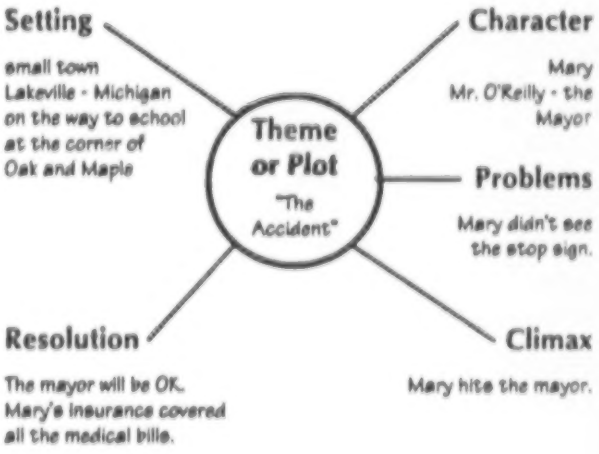
Materials:

Short story appropriate for student's interest and ability.

Procedure:

Have student read story silently and then with tutor's help fill in the blanks on the map.

> Mary lives in a small town in Lakeville, Michigan. Mary is just sixteen years old and is learning to drive. She is a very nervous driver. On the way to school, Mary had an accident. She did not see the stop sign at the corner of Oak and Maple. She hit Mr. O'Reilly, the mayor of Lakeville. Mary had good insurance. All of the mayor's hospital bills were covered. Mary is glad that the mayor will be OK.



Source: Robeson, Ed, Marsha DeVergilio, and Donna DeBotte. *LITSTART: Literacy Strategies for Adult Reading Tutors*. 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Mapping

(Pre-Reading)

Rationale:

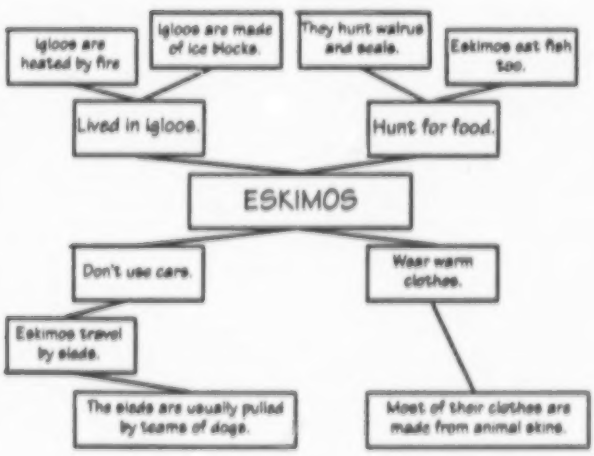
1. Activates the student's prior knowledge of the topic.
2. Provides a system of organization for information.
3. Helps set purpose for reading.

Materials:

passage to be read
paper
pencil

Procedure:

1. Student and tutor discuss topic.
2. Tutor writes the key idea in the center of the paper.
3. The student and tutor brainstorm information about the key idea.
4. After reading the passage, the student and tutor revise the map.


Igloos are heated by fire
Igloos are made of ice blocks.
They hunt walrus and seals.
Eskimos eat fish too.
Lived in igloos.
Hunt for food.
ESKIMOS
Don't use cars.
Wear warm clothes.
Eskimos travel by sleds.
The sleds are usually pulled by teams of dogs.
Most of their clothes are made from animal skins.

Mapping

(Post-Reading)

Rationale:

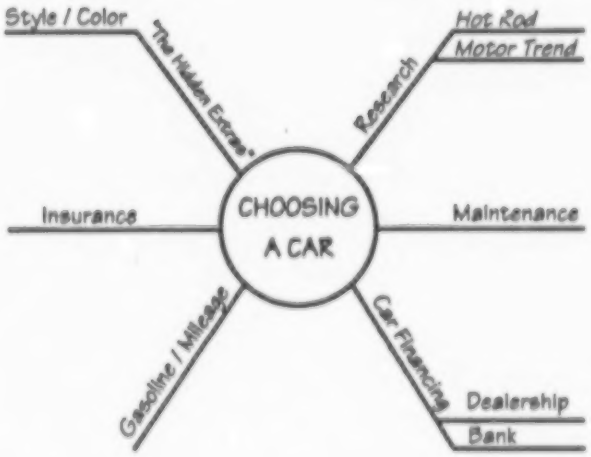
Provides the student with a way to organize and retain information for later use.

Materials:

passage to be read
paper
pencil

Procedure:

1. Student and tutor read the passage.
2. Tutor writes the key idea in the center of the paper.
3. The student supplies information remembered from the story.
4. The tutor writes this information on the map.
5. The tutor supplies information from the story and adds to the map.
6. Repeat steps 3 through 5, as needed.



Source: Robson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors*. 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Duet Reading

(also called "Neurological Impress Method")

There may be times when a student needs or wants to read material that is above his present reading level. As a tutor, you can help him do this by reading it aloud *with* him. The duet reading method also enables the student to:

- increase his vocabulary and fluency of reading;
- gain confidence in his reading ability;
- learn to read with expression; and
- begin to discover that reading can be enjoyable.

The method is especially good for students who have finished *Skill Book 3* of the Laubach Way to Reading series. However, you may choose to use the method with a student who is working in the first two books *if*:

- the student already has a fair-sized sight vocabulary; or
- he reads hesitantly or word by word. (With this type of student, you can use this method with one of the stories he is currently studying.)

In a California study, students with severe reading handicaps received 7½ hours of instruction in this method over a 6-week period. Their average reading gain was 2.2 levels. The method has also been used with students who have a stuttering problem.

Description of Method

Choose something that's a little "too hard" for the student:

Help the student select something to read that is about 2-3 grade levels above the student's reading ability. The material should be on a topic of interest to the student. It may be a book, a magazine or newspaper article, a pamphlet, or a brochure.

Begin reading together:

Read the book aloud *together*. You should read at a normal speed, trying to use expression and following punctuation. The student reads along, trying to keep up with you.

Use your finger:

Move your finger beneath the lines being read. This helps the student keep up. It also helps him practice reading from left to right and bringing his eye back to the beginning of each new line without losing his place.

Keep going:

Continue to read at a normal rate even if the student hesitates over a word or falls slightly behind. After a few sessions using this method, it will become easier for the student to keep up. It will be a challenge, and he will begin to look ahead at coming words to keep from falling behind.

If the student stops completely, you should also stop, rest, offer the student encouragement, and begin again. Try spending at least ten minutes at the end of each tutoring session using this method.

No questions:

Do not stop to explain the meaning of a word unless the student requests it. Do not ask any questions to see if the student understood the story. The material is to be used ONLY as an oral reading exercise.

Is the book too hard or too easy?

If the student keeps up with little effort, select more difficult material so that it will be a challenge. If the student has a great deal of difficulty in keeping up, recognizes few words, and is becoming very frustrated, use easier material.

Keep in mind:

Do not ask the student to read aloud from the material by himself. Since it is above his reading level, it may be a frustrating experience. Occasionally you may wish to spend a few minutes reading aloud to the student. This should be from material of interest to the student; it can be several levels above his reading level. It will help motivate the student to improve his own reading in order to be able to read and enjoy similar material on his own.

Many students with reading problems were never read to as children, so this can be a valuable experience in helping them in several ways. It can motivate them to practice reading on their own. It can introduce stories that parents can orally tell their children.

Source: Laubach Literacy Action. *The Laubach Way to Reading Tutor Workshop Handbook*. Syracuse, New York: New Readers Press, 1988.

Section 11

Whole Language Writing Strategies

The Language Experience Approach

Purpose

The language experience approach utilizes the student's own words to teach or reinforce basic reading and writing skills.

Advantages

This approach helps the student see that reading and writing are not isolated skills and that they can have a direct connection to her personal experiences. She learns that:

- She can think about many things.
- What she can think about she can talk about.
- What she can talk about she can write about.
- What she can write about she can read, and so can others.

Use of this technique also helps add interest and variety to a lesson.

What Does the Student Talk About?

The student can talk about anything she wants. Often she'll come to class wanting to share something that has happened to her since your last tutoring session. You can use that as the basis for a language experience story. If a topic doesn't readily come to mind or the student seems shy or hesitant, try using one of the following discussion starters.

1. Possible topics:
    - your family when you were growing up;
    - what you most like to do on your day off;
    - the worst day of your life;
    - your ideal vacation;
    - how you feel about learning to read;
    - something you like to cook and how you make it;
    - what you would say to the mayor if you could meet with him;
    - your favorite television show;
    - what you'd like your children to have in the future;
    - the job you'd most like to have.
2. Activities to generate discussion.
    - Ask her to describe a picture that you bring to class or tell how she feels about it.
    - Invite her to talk about a photo that she herself brings to class.
    - Read a story or magazine article to her. Have her retell it in her own words.
    - Read a letter from a personal advice column in the newspaper. Let her tell how she would answer it.
    - Give sentence starters (I can ..., I want ..., I don't ever ...) which the student completes. Let her explain her answers if she wants to.

Writing the Story

The tutor usually writes the story to make it easier for the student to concentrate on what she wants to say rather than on the struggle of writing it down. Follow these steps:

1. Print the story.
2. Write the story exactly as the student says it – even if she doesn't use "proper" grammar.
3. Use correct spelling and punctuation.
4. Leave about one inch between each line.
5. Make two copies using carbon paper.
6. Keep the story relatively short. Four or five sentences are plenty for the beginning student.

Reading the story

1. Read the entire story aloud to the student while you draw your finger under each line. Ask her to correct any part you didn't get right or that she would like to change.

2. Read each sentence aloud, drawing your finger under the words as you read them. Ask the student to read each sentence after you. Again, use your finger as she reads.

3. Ask the student to read the whole passage aloud. Give help where needed.

Building Reading Vocabulary

1. Ask the student to pick out words she'd like to learn to read.

2. Select any others that you think are important, but keep the total to no more than ten (fewer for a beginning student).

3. Ask the student to print each of these words on a separate card (you can cut index cards to make these).

4. Tell the student to place each card under the same word in the story and read it aloud as she does so.

5. Shuffle the cards and ask the student to read each one – going back to the story if she needs help.

Review

1. The student takes the word cards and story home to study.

2. You take the carbon copy. You may want to type it and put it in a three-ring notebook to become part of a permanent collection of the student's stories.

3. If the student's grammar or sentence structure is poor, you might work on some of those skills in future lessons. In that case, prepare a corrected version of her story. Explain that this is another way to say the same thing. Have her practice reading both versions.

Adaptations

1. For Beginning Students

With students who can read very few words and have little confidence in their ability to learn, tutors should use a controlled version of this approach. You'll still be able to use the student's own words, but you won't overwhelm her by asking her to read a story in which virtually every word is new.

Sentence completion activities are more appropriate for such students. Print sentences such as the following on a piece of paper. Read them to the student and ask her to fill in the blanks. Write what she says. Then read each sentence and have her read it after you. Make flash cards of selected words and use other learning activities such as those suggested above for beginning readers. Encourage the student to explain why she chose the words she used.

My children's names are _____ .

My favorite day of the week is _____ .

I think I am _____ .

When I think of death, I feel _____ .

I really don't like to _____ .

2. For More Advanced Students

The student can do the writing herself on a topic she selects or that is assigned by the tutor. Explain to her that it is more important that she get her thoughts on paper than worry about spelling, handwriting, or grammar. You can work together on those things later.

Instead of writing the story on paper, you might have the student write with a simple word-processing program on a computer. Or she can use a software program designed for use with language experience.

3. When Writing Inhibits the Student

Some students may feel awkward or lose their train of thought if they have to speak slowly enough for the tutor to print each word they say. When this happens, consider using a tape recorder and transcribing the sections you want to use before your next lesson.

4. For Groups of Students

Involve each of the students. Write a sentence on the board and ask each person how they would complete it. Write all the answers. Examples:

The most important word in English is _____ .

A friend should be _____ .

I feel happiest when I _____ .

Sample Language Experience Stories[1]

I would like to say, believe it or not, when we are going to school the teacher wouldn't let us talk too much about what was happening in the changing of the times. Like when the Civil Rights started real strong they would say don't be talking about this around so many people. But I could never understand why they didn't want us to talk about it. Until now they really were afraid of the white people.

When a child is going to be born in Cuba, we make a fruit liquor. If I am pregnant one or two months, my mother makes a big pot of syrup, with sugar, water, and all kinds of fruit. We put it away inside a dark room. When the baby is born, we open it and the visitors drink the liquor. The father gives cigars to the men.

[1]Taken from: *Using Language Experience with Adults* (New Readers Press, 1975), Kennedy and Roeder.

Laubach Literacy Action. *The Laubach Way to Reading Tutor Workshop Handbook*. Syracuse, New York: New Readers Press, 1989.

Guided Writing (Beginning)

Rationale:

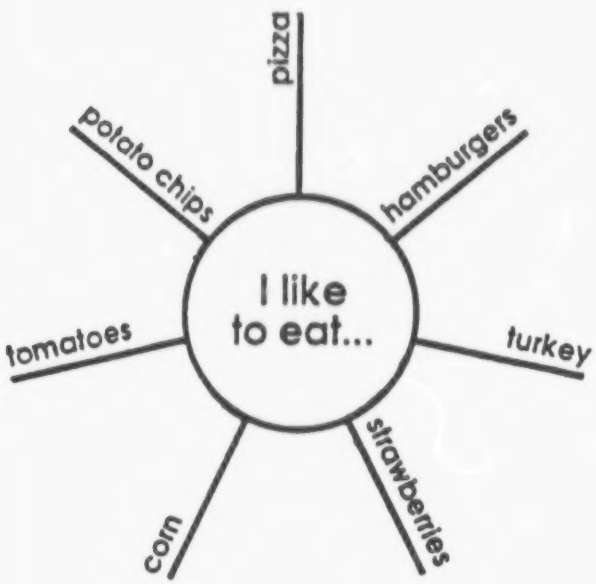
Allows a beginning level student to experience success with writing.

Materials:

pencil/pen
paper

Procedure:

1. Student supplies topic.
2. Tutor supplies words or phrases to make a word map.
3. The student creates text from the map.
4. The student reads the sentences written.



I like to eat pizza.

I like to eat hamburgers.

I like to eat turkey.

I like to eat strawberries.

I like to eat corn.

I like to eat tomatoes.

I like to eat potato chips.

Source: Robson, Ed, Marsha DeVergilio, and Donna De Butts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Guided Writing (Intermediate)

Rationale:

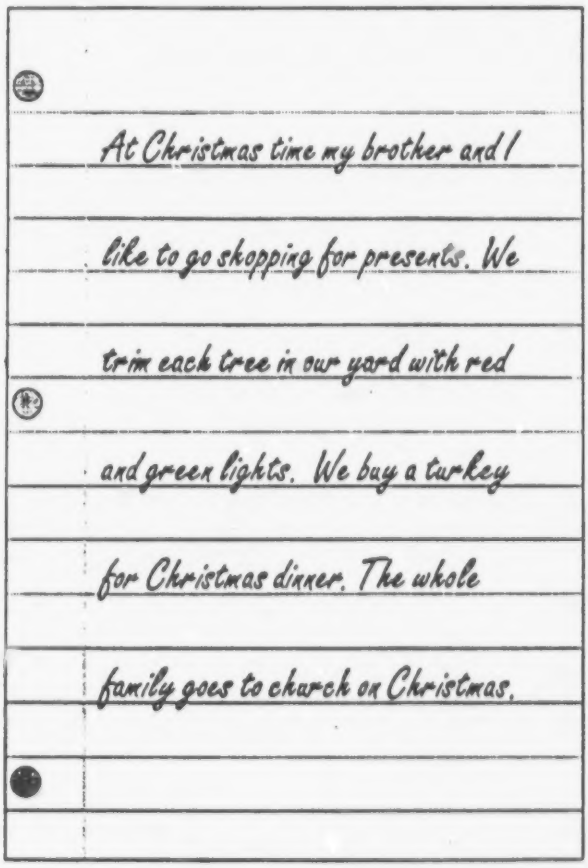
Allows the intermediate student to experience success with writing.

Materials:

pencil/pen
paper

Procedure:

1. The tutor picks a word or phrase and writes it in the center of the paper.
2. The student supplies words that come to mind about the topic.
3. The tutor places the words on a word map.
4. The student uses the map to write a story.
5. The student reads the story to the tutor.


At Christmas time my brother and I
like to go shopping for presents. We
trim each tree in our yard with red
and green lights. We buy a turkey
for Christmas dinner. The whole
family goes to church on Christmas.

Source: Robson, Ed, Marsha DeVergilio, and Donna De Butts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Guided Writing (Advanced)

Rationale:

Provides an opportunity for an advanced level student to experience success with writing.

Materials:

pencil/pen
paper

Procedure:

1. The student supplies a topic.
2. The tutor (or student, if appropriate) prepares a word map.

3. The student uses the map to write a story.
4. The student reads the story.

I'd like to tell you about myself. My name is Maria and I am 54 years old. I worked at a Ford factory and I've just retired. I've been divorced for the last 15 years and have raised a wonderful son all by myself. He is a college graduate and he has a wife and three wonderful children. I love to have them over and cook. My son says I'm the best cook in the world. I also like to grow and can my own vegetables. After I learn to read better, I want to get my driver's license.

Source: Robson, Ed, Marsha DeVergilio, and Donna De Butts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

The Writing Process

Prewriting – *Talk and Think About It!*

- observe, imagine
- brainstorm
- interview
- discuss
- conference, share, reflect

Drafting – *Get It Down!*

- organize, combine, delete
- develop topic sentences
- use supporting details
- expand sentences (5Ws)
- circle word if spelling is uncertain

Revising – *Check It Out!*

- is my message clear?
- have I included enough information?
- do I speak to my audience?
- do I accomplish my purpose?

Editing – *Let's Hear It!*

- read it aloud to yourself (Does it sound OK?)
- ask a friend to listen (Any suggestions?)
- mechanics checklist:
  - ❑ indenting?
  - ❑ capital letters?
  - ❑ ending punctuation?
  - ❑ spelling?

Publishing – *Share It!*

- display it or
- read it aloud or
- submit it for publication

Editing Symbols:

▪ capitalization	sp spelling error	→ indent	^ add letters or words
p punctuation	ww wrong word	¶ paragraph	∿ trade places of letters or words

Source: Carbo, Marie. *Combining the Power of Reading Styles and Whole Language.* Roslyn Heights, NY: National Reading Styles Institute, Inc., 1991.

Writing Portfolios

A writing portfolio is nothing more than a folder or notebook of your student's written materials. It is used for evaluating competency in writing, and traces the student's writing progress. It is compatible with a student centered approach to learning and encourages the student to take responsibility for his own learning.

Evaluating writing is a shared process which involves the student reflecting upon his work. This leads the student towards self-realization; the student comes to view himself as a writer.

Writing is seen as a process which includes the stages of pre-writing, writing, revising (peer, self, or tutor suggestions), rewriting, editing, and making a final copy. The stages are not linear, and stages may be re-entered as deemed necessary.

Contents of the Portfolio

Include in the portfolio some samples of pre-writing (maps or webs) and drafts. This will help you and the student evaluate his progress. All other entries should be final copies, but they do not have to be perfect or clean copies. The intent is to avoid unnecessary recopying of finished papers. It is all right if the student chooses to revise previously entered papers.

The student is asked periodically to reflect on his growth as a writer and the process he has used to improve his writings. He writes about this reflection, but the tutor does not evaluate or instruct on this reflection. It belongs to the student and is there for HIS growth. He may use one or more examples of his writing for this. Some questions that might guide this reflection are as follows:

> What do you notice when you look at your earlier work? Later work?
>
> How does the written work in your portfolio show the ways you have changed and grown as a writer?
>
> Describe the most difficult stage in the writing process.

Some ideas for writing would be sentences, thank you notes, a business letter, a grocery list, and an autobiography.

Introducing Your Student to What Makes Good Writing

The most important element is getting the idea expressed. Does it make sense? Are the ideas expressed clearly using specific as well as figurative language? Freedom from mechanical errors is important, but not as vital as getting the message written down.

Discuss with your student these elements before you begin the process of writing, and review the assessment levels so he will know what is expected of him.

Section 12

Informal Measures for Selecting Suitable Reading Material for an Individual or a Group

Informal Measures for Selecting Suitable Reading Material for an Individual or a Group

Determining Instructional Level

Many experts emphasize the importance of placing students in reading materials which are appropriate both in content and in difficulty. This should be done in all areas of the curriculum, not just in the instructional material used in a reading class. A point of view and a method of obtaining the information necessary for placement in materials is suggested below.

If the percentage of error in what the student is reading is too great, it is very difficult to improve because the student cannot pick out a few things to be learned well. If one is to profit from reading instruction, practice must be provided in materials that limit the percentage of errors. For this reason, reading teachers designate three levels of performance for each person so that the student will be assured of some challenge in the instruction but not so much challenge that it is overwhelming. The criteria for each of the three levels concern the number of errors in word recognition and in comprehension for a given material. An **independent level** is one in which there are very few errors in pronouncing the words and most of what is read is easily understood. This is the appropriate level for reading for pleasure in library materials or for assignments in the content areas where a teacher does not preteach words and concepts needed for understanding before assigning the text.

To assign appropriate material for a reading class, the teacher will want to find an **instructional level**. For this level some words will need to be pretaught before silent reading, and because of the greater emphasis on words, comprehension will be somewhat lower.

A **frustration level** occurs when many words are not understood and comprehension is entirely unsatisfactory.

The following chart suggests the percentages of competence needed for each level:

	Word Recognition	Comprehension
Independent	98-99%	90%
Instructional	94-96%	70-75%
Frustration	-90%	-50%

Many college reading departments have produced their own informal reading inventories based on a graded set of books or other materials to which designated grade levels are attributed. But modern instructional materials differ so widely in teaching strategies, and the levels of reading difficulty at the same designated grade level are so different, that a graded inventory based on materials *other* than those the student will be reading is not very useful. Therefore, the following procedure is recommended for group or individual assessment:

1. When the teacher is ready to test, eight to ten students are assembled. These students should be approximately similar in skill level. A book judged to be appropriate is selected. The teacher gives the first student in the group a copy of the book and keeps one for scoring the student's errors. All the other students are listening.
2. The teacher writes the first student's name in the margin of the book.
3. The teacher asks the first student to read a section of about one hundred running words, estimated in advance and marked / at the end of a sentence.

4. As the student reads, the teacher records responses in this way:

   a. Circles all omissions.

   The boy went in(to)the stable.

   b. Notes substitutions.

   walked
   The boy went into the stable.

   c. Indicates self corrections.

   walked
   The boy went into the stable.

   d. Notes insertions.

   old
   The boy went into the stable.

   e. Supplies the word and indicates thus – T (teacher supplied) – if the student hesitates for five seconds.

   T
   The boy went into the stable.

   f. Notes in the margin F.P. (finger pointing), W.B.W. (word by word reading), Rep. (repetitions to correct or just to gain time), and any other symptoms of stress such as sighing, excessive speed, foot tapping.

   g. Later, teacher goes back to count the number of errors (a, b, d, and e) to determine a word recognition score. Subtracting the errors from 100 gives a word recognition percentage.

5. After each student reads about 100 running words, the book is given to the next student who reads the next 100 running words and so on until all have read. This should be done on several occasions so there will be three or more samples from each student. Vary the first student called on, since later readers have an advantage. Be sure students are always reading material they have had no chance to read before.

6. While following this same procedure with another group of students, allow the first group to read a story independently. Then have the students close their books and answer questions about the story to assess their comprehension, using a sheet of questions prepared in advance. Be sure to include some recall questions, some questions that require inference, some that require organizing the material and some that require the ability to communicate. Minimize the need to write words so as to free students to answer without stress about the spelling required. Use four or more items for multiple choice to reduce the guessing possibilities. Ten questions translate easily to percentages. You can thus obtain a measure of overall comprehension.

7. Compare the results thus obtained with the criteria suggested for an estimate of the degree of mastery of a given level of material. Keep varying the difficulty until you have an instructional level for each student.

CAUTION Some students will miss the same words (usually those little words found in any reading), no matter how simple the material. It is not necessary to place a student in very elementary material if it is these easy words that are being missed. Teach the common words that are not known through games, drill, etc. until the student is sure of them, then retest for placement.

Some students have the notion that to read is to pronounce words. If this ability is far ahead of comprehension, so that placing the student properly for comprehension would be regarded as insulting, teach for comprehension intensively, perhaps through listening, until the student can summarize what is read. Then retest for placement.

130

Source: Colvin, Ruth J., and Jane H. Root. *READ / Reading Evaluation – Adult Diagnosis: A Test for Assessing Adult Student Reading Needs and Progress*. Syracuse, New York: Literacy Volunteers of America, 1982.

Section 13

Readability Formulas

Gunning Fog Index

The Gunning Fog Index is used to determine the grade level of supplementary reading materials you use with your student. For instance, your student may wish to read the brochures from his or her health insurance company, a workplace instructional manual, or a letter from his or her child's school. Sometimes it is helpful to know the reading grade level of written materials, especially if trying to read something above reading grade level might frustrate your student.

To determine the reading grade level of written materials, follow these instructions:

1. Count 100 words to the closest end of a sentence.
2. Count the number of sentences.
3. Divide the result of #1 by the result of #2 to find the average number of words per sentence.
4. Count the number of words using 3 or more syllables. Names and compound words are not counted.
5. Add the results of #3 and #4.
6. Multiply the result of #5 by 0.4 to find the grade level.

The Fry Readability Graph

Another popular readability formula is the Fry Readability Graph, devised by Edward B. Fry of the Rutgers University Reading Institute.

The Fry formula uses the same readability factors – sentence length and difficulty of vocabulary – as the Gunning formula. But the methods used to compute these factors are very different.

Applying the Fry readability formula

A. Taking samples

Count three samples of 100 words from near the beginning, middle, and end of the selection. Stop your count at the 100th word.

But do not count in your samples any proper names or numerals. Count around them just as if they were not there. Thus, if the first 100 words you counted contained five words that were either proper names or numerals, you would have to count to the 105th word to get your 100-word sample.

Otherwise you can follow the same rules for counting words as are given for the Gunning formula.

B. Figuring sentence length

In the Fry formula, sentence length is expressed as "the average number of sentences per 100 words." Notice that this is different from the Gunning formula, which counts words per sentence.

For each sample, count the number of sentences, estimating to the nearest tenth of a sentence.

Add the three figures together and divide by 3 to get the average number of sentences per 100 words.

For example, suppose you got these results when counting the sentences in your three samples.

	Number of sentences
1st sample	6.6
2nd sample	5.5
3rd sample	6.8

18.9÷3 = 6.3 average number of sentences per 100 words

C. Counting syllables

In the Fry formula, the difficulty of words is computed by counting the total number of syllables in the samples. The difficulty of words is expressed as the "average number of syllables per 100 words."

To find this number, count the number of syllables in each 100-word sample. Usually, there is a syllable for each vowel sound. Endings such as *-y*, *-ed*, and *-le* make a separate syllable.

ready (2) wanted (2) stopped (2) bottle(2)

1. Do not count the syllables in proper names or numerals. Remember, they are not included in the samples.
2. Notice that you count the *-ed* ending as a separate syllable even when it is not pronounced separately *(stopped)*.
3. Count all contractions as having two syllables.

4. When treating abbreviations, count the number of syllables that the full word would have when pronounced. Thus, *Mr.* would be two syllables.

The counting will go faster if you count just the "extra" syllables in each word and then add 100.

When you have counted the number of syllables in each of the three samples, add the three figures together and divide by 3 to get the average number of syllables per 100 words.

For example, suppose you got these results when counting the syllables in your three samples.

	Number of syllables
1st sample	124
2nd sample	141
3rd sample	158
	423÷3 = 141 average number of syllables per 100 words

D. Finding the grade level

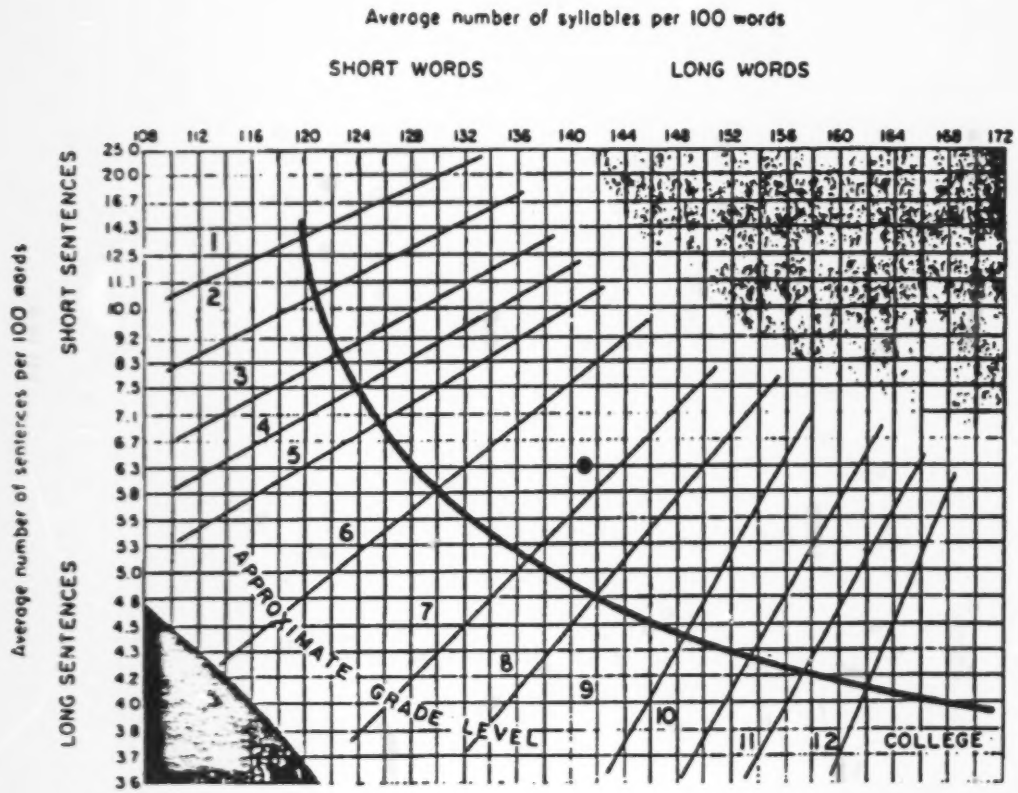
Now you have found the average number of sentences per 100 words and the average number of syllables per 100 words.

Plot these two figures on the Fry Readability Graph. Most plot points should fall within the heavy lines that mark off the grade levels.

The plot point for our two figures, 6.3 sentences and 141 syllables, is in the 7th grade range, where the large black dot is on the graph.

If you find great variability in either sentence length or the syllable count for the three samples, then randomly select several more samples and average them in before plotting. You should note this variability in the report of your findings.

If the plot point falls in a gray area, it means that grade-level scores are not valid.



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Applying Fry to short selections

You can apply the Fry formula to short selections, that is, selections too short to give you three 100-word samples. Just follow the steps below.

1. Count the total number of words in the selection.
2. Count the sentences.
3. Count the syllables.
4. Find the average number of syllables per 100 words:

$$\frac{\text{100 x No. of syllables}}{\text{No. of words}} = \frac{\text{Average no. of syllables}}{\text{per 100 words}}$$

5. Find the average number of sentences per 100 words:

$$\frac{\text{100 x No. of sentences}}{\text{No. of words}} = \frac{\text{Average no. of sentences}}{\text{per 100 words}}$$

6. Plot these two figures on the graph.

Who uses the Fry formula?

The Fry formula is used by the Adult Performance Level Project bibliographers and by Literacy Volunteers of America, Inc. These groups chose the Fry formula because it is somewhat more accurate than Gunning below the 6th grade level. They also feel that the Fry formula is fairly easy to use. Perhaps you, too, will prefer the Fry formula.

Source: Laubach, Robert S. and Kay Koschnick. *Using Readability: Formulas for Easy Adult Materials.* Syracuse, New York: New Readers Press, 1977.

Section 14

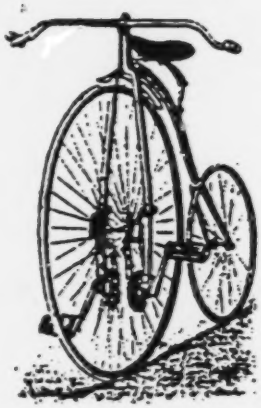
Phonic Analysis

Introducing Consonant Sounds

There are several options for introducing consonant sounds:

- Select a published adult beginner book that teaches consonant sounds. Supplement the activities in the book as needed with extra words.
- Develop a file or list of words to help the student practice and remember the consonant sounds:
  1. *Generate a list of words that begin with a selected letter.* You can do this yourself before the lesson or together with your student during your lesson. Any reading selection can be used as a source of words to start the list. Also, consider words of personal significance to the student such as names of family members, local streets, city, state, and employer.
  2. *Help the student read the list and isolate the sound at the beginning of the words.*
  3. *Have the student choose a favorite KEY WORD as a memory aid.*
  4. *Write the student's selected key word at the top of the list.* If possible, include a sketch or picture of the object or action represented by the key word.

b bike
ball
baby
book
bird
boy
bottle
bat



B

Bob
Bonnie
Baker St.

Source: Robson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Practicing Sounds

After introducing a sound, provide practice for your student either by following an instructional series or by developing your own exercises.

Here are some examples:

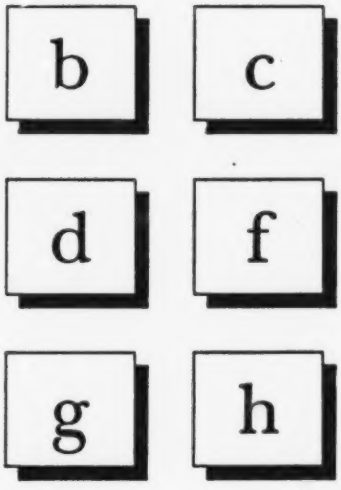
I will say a word. If you hear the /b/ sound (for example) on the beginning of the word, say "yes." If you do not hear the /b/ sound, say "no."

I will say a sound. You say the letter that makes that sound.

I will say a word. You say the letter you hear at the beginning of the word.

I will say a word. The word will begin with one of these two (or more) letters. You say the letter.

I will show you some letters (make flash cards). You say the sound (or the key word and the sound). Sort cards into two piles as the student gets right or wrong answers. Review the ones missed.



Suggestions

- Have the student write the letter, rather than say it.
- Have the student identify the ending sound, rather than the beginning sound.
- Have the student identify both the beginning and ending sounds.
- For beginning students, try to avoid blends: use "fee" but not "free" and "sing" but not "sting."
- Give the student credit for identifying the correct SOUND even when the spelling does not match.

City begins with an S sound.
Phone begins with an F sound.
Chef begins with an SH sound.

Cars ends with a Z sound.
Love ends with a V sound.
Laugh ends with an F sound.

- Watch for patterns in your student's errors. If your student consistently confuses two sounds, develop a practice list for just those two sounds.

Source: Robson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Consonant Sounds Reference

This information is a reference for you on consonant sounds.

B: It usually produces a consistent sound. The B can be silent (comb, subtle).

C: This letter has two sounds, /k/ and /s/. Since it does not sound like its name, it is difficult for beginners to learn.

> When C is followed by an E, I, or Y, that C will sound like an S, otherwise known as a soft C. This rule is over 99% true!

Examples:

- **CE:** face, cent, receive, ceiling, chance, innocence
- **CI:** city, circle, circumstance
- **CY:** fancy, racy, bicycle, cyclone, cymbal, cyst, democracy

D: Produces a consistent sound. The D is silent in the word Wednesday.

F: It's a consistent sound that can be sustained.

G: It does not sound like its name, and it forms special combinations. It can be silent (ought, gnat, sign).

> When G is followed by an E, I, or Y, that G will sound like a J. Such a G is known as a soft G.

This rule is not as reliable as the soft C rule. Some notable exceptions are: get, give, and girl.

Note: The letter U is often used to ***protect*** G from the softening effects of a vowel (guess, fatigue, guide, guitar, guy).

Examples:

- **GE:** age, orange, refrigerate, germ, fudge, general, George
- **GI:** giraffe, gin, giant, ginger, region, religious, magi
- **GY:** cagy, gyrate, gym, gypsy, Egypt, biology, apology

H: It does not sound like its name. It is often silent (school, honest, John), and it often combines with other letters to make new sounds (ch, gh, ph, sh, th, wh).

J: It produces a consistent sound (same sound as the soft G).

K: Its sound is consistent (same sound as the hard C). It is almost always silent in the combinations of KN (know, knot).

L: Like the letter R, it often blends with other consonants. It can be silent (salmon, half).

M: It is easy to make consistently, and it can be sustained.

N: Its consistent sound can be sustained. It can be silent (hymn, autumn).

P: It produces consistent sound. It can be silent (psalm, coup, receipt).

Q: It usually combines with a U to form the sound KWUH, but sometimes the U is silent and the Q sounds like a K (unique, liquor), and occasionally there is no U (Iraq, qiana).

R: When R follows a vowel, it changes the vowel sound. It often combines with other consonants to form blends. Some students, especially foreign-born, have trouble making the R sound.

Source: Robeson, Ed, Marsha DeVergilio, and Donna DeBatts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

S: It is a sound that can be sustained. It is the same sound as the soft C. The S often sounds like Z at the end of a word (rose, cars). The S can be silent (corps, debris, island).

T: T is a consistent sound. It can be silent (depot, often, castle).

V: It's a consistent sound that be sustained.

W: Does not sound like its name. It often serves as a vowel. It can be silent (sword, answer, who), and it is almost always silent in the combination WR (write, wrap).

X: X makes the /ks/ sound at the end of words such as box and six. It may sound like /z/ at the beginning of words like xylophone or Xerox or may say its name as in x-ray.

Y: At the end of a one-syllable word, it makes the long I sound (my, cry). At the end of a two-syllable word, it makes the long E sound (baby, city).

Z: It's a consistent sound that can be sustained.

Consonant Word List

a		n	name
b	bird	o	
c	car	p	piano
d	door	q	quart
e		r	rose
f	fish	s	start
g	gas	t	toe
h	hello	u	
i		v	vase
j	jello	w	wagon
k	kite	x	tax
l	label	y	yarn
m	man	z	zebra

Source: Robson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Blends

A blend is a string of two or three consonants (bl, str) which blend together yet retain their original sounds.

Initial Blends

The blends with **l**	bl	cl		fl	gl	pl			
The blends with **r**	br	cr	dr	fr	gr	pr	tr		
The blends with **w**			dw				tw		
The blends with **s**	sc	sp	st	sk	sm	sn	squ	sl	sw
The triple blends	scr	spr	str	spl					
The digraph blends		shr	thr						

Teaching Blends

There are two main options for teaching blends:

- Select a published adult beginner book that includes instruction on blends. Supplement the activities in the book with extra words.
- Develop a file or list of key words to help the student practice and remember the sounds of the blends.

1. Generate a list of words that begin with a selected blend. Any reading selection can be used a source of words to start the list. Consider words of personal significance to the student.
2. Help the student read the list and isolate the sounds at the beginning of the words.
3. Reread the list with the student, emphasizing the blend.
4. After introducing a sound, provide practice for your student either by following an instructional series or by developing your own exercises.

Source: Robson, Ed, Martha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Digraphs

A digraph is a pair of consonants that forms a new sound. The original sounds of the letters are lost.

CH: Makes a fairly consistent sound. Sometimes the H is silent (echo, mechanic) and sometimes the CH sounds like SH (chef, Chicago, pistachio). The CH is silent in the word "yacht."

GH: It can have 3 different sounds:

- **GH as F:** Tough, rough, enough, cough, laugh, slough
- **GH as G:** ghost, spaghetti, ghetto, dinghy, aghast
- **GH silent:** dough, through, eight, caught, straight, night

NG: You cannot hear a true N or G sound. Teach this sound by using word families (-ing, -ang).

NK: A combination of a digraph (NG) and a K sound. This sound is really NGK. Teach this sound by using word families (-ink, -ank).

PH: Has the same sound as F (phone, photograph, physical, alphabet).

SH: A consistent sound that can be sustained.

TH: There are actually two TH sounds:

- ***Unvoiced:*** Soft and whispered (thank, three, thumb)
- ***Voiced:*** Buzzy (this, these, they)

Put your fingertips on your throat as you make these sounds to feel the difference or your hands over each ear to hear the difference. Dictionaries distinguish between the two sounds with slightly different symbols.

Most student do not need to know that two TH sounds exist.

WH: While many people pronounce WH the same as W, some people pronounce the WH like an HW, putting a subtle puff of air before the W.

Most students do not need to know that two WH sounds exist.

3-D Flashcards

The digraph sounds are sometimes difficult for students to learn. Using three-dimensional flashcards is a good way to help the student remember the sound. They provide an opportunity to utilize the visual, auditory, and kinesthetic/tactile learning styles.

1. Select word to be learned.
2. Print the word on a 5 x 8 flashcard
3. Glue physical item to flashcard. Student utilizes multisensory approach to learn word.

3-D Flashcards can be easily stored in a regular 5 x 8 card file.

Source: Robeon, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Digraphs — Word List

ch

children
check
chin
chest
church
cheek
change
cheer

ng

sing
bring
wing
ring
wrong
spring
song
rang

sh

shoe
she
short
shut
shell
ship
shall
shirt
show
shovel
shower
shout
sharp
sheep
shelf
shift
shin
shine
shimmer

th

the
that
this
their
these
them

three
thirty
thing
third
thumb
thunder
thread
thick
thought
thank
Thanksgiving
Thursday

ph

photo
phonics
pharmacy
physician
phrase

wh

white
where
what
when
which
why
wheel
while
whether
whistle

Source: Robson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Vowel Sounds

There are five vowels: A, E, I, O, U (and sometimes Y and W).

Every word has at least one vowel.

Each vowel has two main sounds: a short sound and a long sound. A vowel should generally be considered short unless there is some sign or signal to tell you it is long.

The vowel sounds are more difficult to learn because:

- They have several different sounds.
- Some sounds are almost alike.
- Sometimes it is difficult to tell which sounds to use in a new word.

The eighteen vowel sounds in English

5 Short	5 Long
a (apple)	a (ate)
e (echo)	e (eat)
i (in)	i (ice)
o (olive)	o (oats)
u (up)	u (use)
3 R-Controlled	**5 Other**
ar (art)	aw/au (awful)
er/ir/ur (urgent)	oy/oi (oil)
or (or)	ow/ou (out)
	oo (boot)
	oo (book)

Short Vowels

Start with short vowel sounds. Introduce one vowel sound at a time. Provide practice for your student either by following an instructional series or by developing your own exercises using short vowel word families.

The words below may help your student hear the difference between the short vowel sounds.

Short a	Short e	Short i
apple	echo	itch
answer	end	in
ant	exit	is
angle	exercise	it
ad	evidence	Indian
animal	episode	igloo
axle	elevator	inch
actress	escalator	interception
ask	elephant	infield
ashes	egg	injury

Short o	Short u
October	umbrella
octopus	umpire
olive	unlucky
opportunity	ugly
operation	uncle
optical	under
object	understand
occupation	us
octane	up
opposite	upset

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Source: Robeson, Ed, Marsha DeVergilio, and Donna DeBatts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Long Vowels

Introduce one vowel sound at a time. Provide practice for your student either by following an instructional series or by developing your own exercises using long vowel word families.

The following rules will help you to determine if the vowel should be long. The list of words following the rules will provide your student with practice in hearing long vowel sounds in words.

In long vowels, the name of the letter and the long vowel sound are the same.

Long a	Long e	Long i
able	each	idea
ace	eek	I'll
ache	easy	iris
aide	eat	I'm
aim	eel	item
ape	ego	icy
apex	ether	Irish
ate	east	iodine
agency	either	Iowa
alien	even	ideal

Long Vowel Rules

An E at the end of a word makes the vowel long.

not	note
kit	kite
rod	rode

When two vowels are together, the first vowel is long and the second vowel is silent.

seat	coat	maid
beef	bean	toad
loan	toast	bait

A vowel at the end of a syllable is usually long.

ba/con	go	ba/by
A/pril	e/ven	i/dea
o/pen	o/ver	he/ro

Long o	Long u
open	use
over	usual
omit	unit
owe	union
oatmeal	uniform
own	unison
obey	unicorn
Ohio	useless
oak	universe
odor	ukulele

Source: Robeson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

R-Controlled Vowels

ir	er	ur
girl	her	urchin
girdle	sister	urge
sir	fern	furniture
stir	member	murder

ar	or
farm	or
arm	orbit
are	orchestra
artist	bore
Arthur	ornament

Other Vowel Combinations

- Introduce one new vowel sound at a time.
- Use words that are part of your student's sight word vocabulary as examples.
- The following words may help your student practice these new sounds.
- These vowel combinations are best learned by using word families.

oo	oo
book	broom
good	ooze
stood	school
crook	food
shook	boot

al	au	aw
all	auction	awful
always	August	awkward
also	author	awe
call	autumn	lawn
already	automatic	claw

oi	oy
oil	boy
join	oyster
avoid	joyful
coin	boycott
rejoice	enjoy

ou	ow
ouch	how
out	now
our	brown
loud	cow
about	down

Source: Robson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Section 15

Word Families

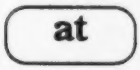
Word Families

Preparation

Before attempting word families, your student must know the consonant sounds and how to rhyme. Most students understand rhyming after being given a few examples. If your student has trouble, do not teach word families yet.

Procedure

1. Select a word family pattern from words your student knows.



2. Write the pattern and ask your student to read it.
   If your student hesitates, say "at."

3. Write a rhyming word underneath. Ask the student for the word.
   If the student doesn't know the word, supply it.

4. Keep going.

5. Have the student reread the list.

Source: Robson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

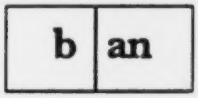
Variations

- Keep each word family on a separate file card for easy reference and review.
- For extra review, point to words in random order on the list.
- Include nonsense words. (Do not use nonsense words with students learning English as a Second Language.) Explain to your student that some of the words are not real words, but may be part of longer words.

mem	is part of	member
tem	is part of	temperature
lem	is part of	lemon

- Make flashcards for each family (-ap, -ell, -ot, etc.). Make another set of cards for each consonant, blend, or digraph. Place the consonant cards in front of a family and flip through the letters.

- Get a set of index cards that have a spiral binding and cut the cards as shown below. Use the right hand side for family and the left hand side for the consonants, blends, and digraphs.



To help the student understand the meaning of the words generated using word families, use the words in context. For example:

can

I bought a **can** of coffee.

I **can** do that.

pop

Bring me a bottle of **pop** from the store.

Before the light bulb burned out, there was a loud **pop**.

wave

The large **wave** crashed on the shore.

Wave to all the people.

Asking for definitions also clarifies the subtle sound differences between such words as PEN and PIN, or BAN and BAND. When your student gives an incorrect definition, use the opportunity to show both spellings and explain the difference.

Word families are also used to:

- Enlarge the student's reading vocabulary.
- Teach spelling skills.
- Prepare the student for using longer words.
- Prepare the student to read independently.

Source: Robeson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors*. 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Section 16

Syllables / Compound Words / Contractions

Syllables

How to Teach Syllables

The use of syllabication is one key that many skilled readers use in unlocking multisyllabic words. It is a skill that will enable new readers to begin to decode more complex material.

Syllables are taught as part of phonics because syllabication affects vowel sounds. Each syllable must have one and only one vowel sound.

Listed below are the basic **traditional** rules.

Rule 1: A consonant between two vowels usually goes with the second vowel unless the first vowel is accented and short.

be/gin **cab/in**

Rule 2: Consonants between vowels are divided unless they are a blend or digraph.

sil/ver **pro/phet**

Rule 3: When three consonants are between two vowels, divide between the blend or the digraph and the other consonant.

ar/cher **tan/trum**

Rule 4: Prefixes always form separate syllables.

dis/close **pre/pare**

Rule 5: Always divide compound words.

foot/ball **sea/plane**

Rule 6: Final le picks up the preceding consonant to form a syllable.

a/ble **prin/ci/ple**

Source: Robson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors.* 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Compound Words

A compound word is made by putting words together.

shoe	+	lace	=	shoelace
paper	+	back	=	paperback
work	+	room	=	workroom

Tutors can use compound words to help the student

- Understand the concept of syllabication

  drug/store

- Bridge the gap from single syllable word families to more complex words

  lone **lonesome**

- Increase comprehension by using the word(s) within words to extract meaning

  never/the/less

Contractions

Our spoken language blends words and letters together. Contractions are an example. Contractions are two words combined together. An apostrophe substitutes for the missing part.

do + not = don't

Adult new readers use contractions as a natural part of their spoken vocabulary and will see them frequently in print. English as a Second Language students find it difficult to use contractions.

Source: Robson, Ed, Marsha DeVergilio, and Donna DeButts. *LITSTART: Literacy Strategies for Adult Reading Tutors*. 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

Section 17

Sight Words

Sight Words

The reading vocabulary consists of words recognized in print instantly. Tutors will want to help new readers develop an increasing independent reading vocabulary. Any of the keys (phonics, sight words, word families) can help build that vocabulary.

Sight words allow the new reader to look at a word as a single unit. The reader is able to analyze its shape and special features. Using the word in context will help move that word into the reading vocabulary. Words that are phonetically inconsistent are better learned using the sight method. Any word that creates problems for the student should be learned by sight.

Procedure for increasing sight vocabulary

1. Put the word to be learned on a flashcard.
2. Use the word in a sentence.
   Write the sentence on the back of the card.
3. Have the student practice saying, spelling, and writing the word.
4. Review the word regularly.

friends

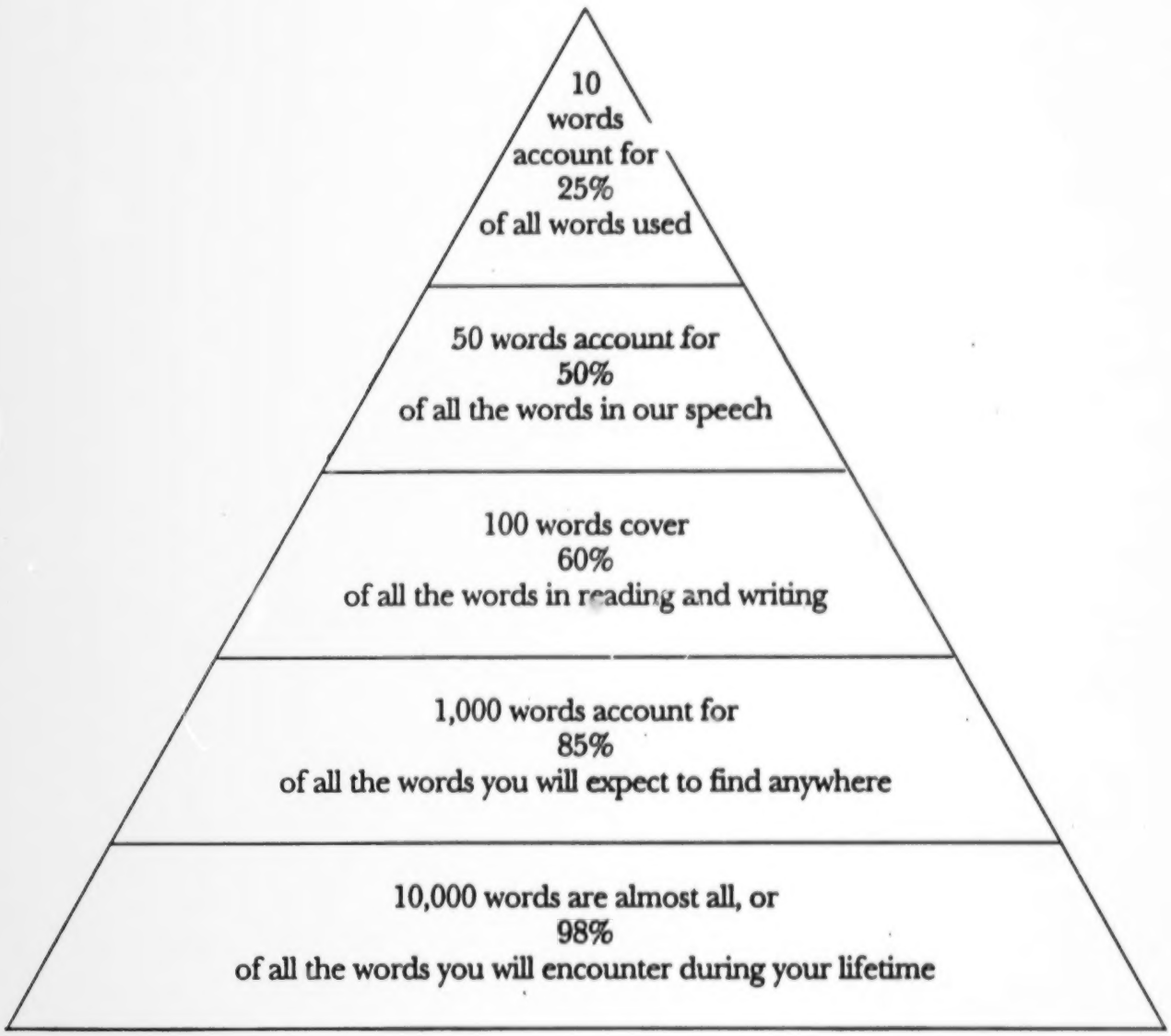
Tom and Mark are my **friends**.

Tips

- Select the words to study from the student's reading.
- Practice selected words in context to reinforce meaning.
- Have student match sight word cards to words in a story.
- Have student look through a newspaper or magazine article for a given sight word and circle it when found.
- Attach a picture to the word card to ease comprehension especially for foreign students.
- Mark the card each time the student recognizes the word instantly; retire it after 3 to 5 correct responses.

Source: Robeson, Ed, Marsha DeVergilio, and Donna DeBetta. *LITSTART: Literacy Strategies for Adult Reading Tutors*. 2nd ed. Lansing, Michigan: Michigan Literacy, Inc., 1990.

The English Word Pyramid



The 10 most useful words in English are:

a and be for have in of that the to

These 50 words are used most often *in writing letters*:

1. I	11. it	21. at	31. very	41. do
2. the	12. that	22. was	32. my	42. been
3. and	13. if	23. with	33. had	43. letter
4. to	14. your	24. but	34. our	44. can
5. a	15. have	25. on	35. from	45. would
6. you	16. will	26. is	36. am	46. she
7. of	17. her	27. all	37. one	47. when
8. in	18. are	28. so	38. him	48. about
9. we	19. not	29. me	39. he	49. they
10. for	20. as	30. this	40. get	50. any

These 50 words are found most often *in what you read*:

1. the	11. he	21. at	31. we	41. there
2. and	12. you	22. on	32. ask	42. this
3. a	13. for	23. have	33. all	43. as
4. to	14. had	24. but	34. one	44. out
5. of	15. is	25. me	35. from	45. said
6. I	16. with	26. my	36. are	46. would
7. in	17. her	27. not	37. were	47. what
8. was	18. she	28. be	38. or	48. their
9. that	19. his	29. him	39. when	49. no
10. it	20. as	30. they	40. up	50. if

There are about a half million words in the largest English dictionary, but you can expect to see most of them very rarely, only in 2% or less of everything you read.

– Source unknown.

Section 22

Tutor "Real World" Materials

Tutor "Real World" Materials

Community Resources

Library materials and library skills
- Applications for library cards
- Card or book catalog
- Dictionary
- Encyclopedia
- Index
- Table of contents

Maps
- Municipal
- State
- World

Medicare forms

Social Security forms

Telephone directory

Transportation
- Bus schedules
- Stop signs
- *Maps:* Roads, highway, state maps and state names
- Directions for safety
- Driver's license
  - Driving manual
- License plates
- Parking area signs
- Road signs
  - *Directions:* exit signs, north, south, etc.
  - Road curves
  - Left lane, right lane
  - Construction Ahead, Stop, etc.
  - Street, avenue, drive, road
- Service-station signs and trademarks
- Tickets for bus, train, airplane
- Traffic tickets
- Warning signs

Consumer Economics
- Bank checks
  - Deposit slips
  - Withdrawal slips
- Canned goods labels
- Clothing labels
- Credit contracts
- *Directions:*
  - In a cafeteria
  - Labels on food
  - On product uses
  - In a plant
- Food stamps
- Insurance-policy statements
- Menus, restaurant bills, fortune cookies
- Newspaper ads for groceries
- Products and packages
- Sales catalogs
- Sears' and Ward's catalogs
- Store/supermarket signs
- Want ads: job; purchasing
- Warning signs

Forms/Schedules, etc.
- *Application forms:* jobs, courses, etc.
- Driver's license forms
- Income tax forms
- Medicaid/Social Security
- Racing forms
- Baseball schedules
- Calendars
- Church programs
- Railroad schedules
- Brochures
- Handbooks (union)
- Manuals (scouting)
- Regulations: hunting/fishing
- Instructions: (variety)
  - Hiking and skiing, games
  - Cleaning and washing clothes
  - Plant raising, gardening

Job specifications
work contracts

Tickets ***(variety):***
bus; sports; entertainment
lottery; racetrack

Want ads

Miscellaneous

Collection of learner-written stories
Collection of poems
Collection of slides (illustrating local points of interest, signs, storefronts)
Comics
Crossword-puzzle magazines
Current song texts
Horoscopes
Human rights:
Civil rights, Legal rights, Women's rights
Motion pictures:
notices, advertising, announcements
Modern plays:
announcements, advertising
Paintings:
exhibition announcements
Political speeches in newspapers and magazines
Scrapbooks of news or magazine pictures
Tape recordings of books being read that can be used as the reader "follows" the book
Television program
TV guides
Word recognition:
Anagrams
shopping games
Flash cards
Greeting cards
Plastic letters
Word games

Section 24

Teaching Critical Thinking

Critical Thinking

Definition: Critical Thinking is the way we organize thoughts to reach reasonable conclusions.

– Barry K. Beyer

Critical Thinking/Reading: Nonfiction

Skills:

Make predictions about selection.

Identify topic of selection.

Compare predictions with content of selection.

Compare solutions to problems presented in the selection with own solutions.

Determine positive/negative consequences of the solutions.

NOTE: Do not attempt to teach all skills in every lesson. Choose one or two skills that match learners' goals.

Method for Teaching Nonfiction Selections:

Prereading

1) Read title of selection and examine pictures and other graphic clues to predict the topic together.
2) Share experiences about the topic with one another.
3) Share beliefs or points of view about the topic.
4) Predict what the author will say about the topic.

During Reading

5) Ask learners to read the selection silently or aloud in order to predict who or what the selection is about. Ask learners to stop at predetermined points to confirm or change predictions to match the selection.

Postreading

6) To determine statements which reflect one viewpoint, discuss these questions with the learners:

   a) Who is making the statements?

   b) What group(s) or special interest(s) do they represent?

   c) What is their interest in supporting this idea?

   d) If you do not have enough information, how can you find out more about this subject?

7) If you were asked to offer a solution, what would it be? Describe your plan.

8) What could be some positive consequences if your plan were enacted?

9) What could be some negative consequences if your plan were enacted?

Material:

Laubach Way to Reading Series

Challenger Series

Steck-Vaughn's Reading for Today / Reading for Tomorrow Series

News for You

Newspapers

Literacy Volunteers of America publications

Books and magazines of interest to the learner

National Issues Forum publications

Critical Thinking/Reading: Fiction

Skills: Identify the main characters in the selection.

Identify the problem in the selection.

Describe how the main characters solved the problem.

Explain the positive and negative consequences of the solution that was chosen.

Compare the main characters' solution to the solution you would have chosen.

Describe the positive and negative consequences of your solution.

NOTE: Do not attempt to teach all skills in every lesson. Choose one or two skills that match learners' goals.

Method for Teaching Fiction Selections

Prereading

1) Ask learners to read the title of the selection and words in italics. Examine pictures and graphic clues to determine the setting, as well as the topic, of the selection.

During Reading

2) Read the selection together silently or aloud, stopping at predetermined points, to confirm or change predictions.

Postreading

3) Together, identify the main characters and describe their personalities and physical attributes.

4) Discuss with learners how the main characters solved their problems.
Ask learners to:
describe the problems.
explore choices/options.
examine consequences of choices/options.

5) Compare/contrast the option chosen in the selection with the option they would have chosen. Together:
discuss possible choices.
describe the consequences of option that was chosen.

Material:

Books from the Adult New Readers Collection at the Main Branch of the Dayton Public Library.

Books from other branch libraries in Montgomery County.

Books from the New Readers Press which can be purchased from the Miami Valley Literacy Council office, or ordered directly from the New Readers Press Catalog.

Books from the Literacy Volunteers of America collection, especially the "Other Writers' Voices" collection. They can be found in the main branch of the Dayton Public Library's Adult New Reader Collection.

Any work of fiction of interest to the learners.

Propaganda

Definition: Propaganda is the systematic effort to persuade a body of people to support or adopt a particular opinion, attitude, or course of action. (*Webster's New World Dictionary*)

Propaganda in Advertising:

Propaganda techniques are used in advertising and general print. The express purpose of propaganda techniques in advertising is to sell a product to consumers, whether the product is a bar of soap or a political candidate.

Propaganda Techniques Used in Advertising:

Definitions are provided for background information only. While you may choose to casually introduce the terms to learners, they should not be required to memorize the terms or the definitions.

1) Sex Appeal – Sex used to sell product.
2) Snob Appeal – Consumer joins upper class by using product.
3) Appeal to Tradition – Experience is the key to being a quality candidate or a quality car.
4) Appeal to Authority – Well-known respected person endorses product.
5) Outright Propaganda – If you don't buy this product, you're an outcast or a bad person.
6) Plain Folks – Good solid product, nothing fancy, serves basic need.
7) Something for Nothing or More for Less – Cheaper product is better than the higher priced product. Big promise but cannot deliver.
8) Appeal to Excellence – Similar to snob appeal. Only the best will do.

9) Everyone Else Has One – If you don't want to be different, buy this product.

10) Improve your Image – If you use this product, you will be handsome/beautiful.

11) Be a Success – Use this product and you will be successful.

Skills: Identify propaganda in print and visual media.

Identify the target audience.

Explain how propaganda influences the target audience.

Use knowledge of propaganda in personal life.

Method for Teaching Propaganda in Advertising

1) Discuss reasons for learning about propaganda by asking learners to tell about something they purchased that did not live up to the ad. Ask learners how they felt about this experience.

2) Share your own experiences with propaganda.

3) Tell learners that to try to avoid these unpleasant experiences in the future, we will learn about propaganda and find examples on television, in magazines and in newspapers.

4) Identify the audiences that advertisers are trying to attract, and discuss how the propaganda attracts a particular audience.

5) Share examples of propaganda in advertising that you have found. Discuss ads with learners by asking them what is going on in this picture. Add information that learners may overlook.

6) Ask learners, "What audience is this ad trying to attract?" Ask learners how they know this is the target audience. Ask learners how the ad attracts this audience.

7) Tell learners that most advertisers have a target audience in mind when they design ads. If we examine ads carefully, we will usually discover the target audience.

8) Together, find ads in newspapers, magazines, and on television. Discuss the ads by identifying the target audiences, and explain how propaganda is used to attract them.

9) Discuss popular ads on television by asking the learners what time of day the ad is shown. Then ask the learners to predict who watches television during that time. Ask them to describe the audience.

10) Tell them that advertisers plan the ads around the audience. They also plan the time of day to run the ads.

11) Apply knowledge of propaganda in advertising to real-life situations and share these experiences with one another.

12) Ask learners to create and present their own commercials. Ask them to identify the target audience. Next, ask learners how the commercial appeals to the target audience.

13) Discuss with learners how they will use their knowledge of creating commercials when they read ads or view them on television. Ask them how this knowledge will help them to be wiser consumers.

14) Ask learners to share their use of this information with you when they use it to make real life purchases. Ask them how this knowledge helped them to make a wise purchase.

Material:

Newspapers

Magazines

Print material of interest to learners

Television commercials

Create own ad campaign

General Propaganda in Print

The general propaganda techniques described below are used by writers who wish to change our thinking about issues (abortion, ecology), political candidates (Republican, Democrat), or how we conduct our lives (mandatory birth control, drug abuse). The propaganda techniques in this section are found in editorials, letters to the editor, and articles in the regular section of the newspaper. The authors try to persuade readers to adopt a certain point of view or to vote for a particular candidate.

Propaganda in Print Techniques:

The definitions are presented for background information only. Learners should not be required to memorize the propaganda terms or their definitions.

1) Name Calling – Uses labels, usually negative, instead of discussing the facts.

2) Glittering Generality – Vague phrases that promise much and use positive symbols.

3) Transfer – Attaching a set of symbols to a purpose for which they are not intended.

4) Testimonial – A prominent person to endorse an idea or a candidate.

5) Plain Folks – Pretending to be one of the folks.

6) Bandwagon – Everybody's doing it.

7) Cardstacking – Reports only the parts that are favorable.

Skills: Identify propaganda used in print.

Identify the target audience.

Explain how propaganda influences the target audience.

Use knowledge of propaganda in real life situations.

Method for Teaching Propaganda in Print

1) Bring in examples of propaganda in print to share with learners.
2) Point out that writers of propaganda have target audiences in mind when the propaganda is created. Explain that that is why writing samples appear in carefully selected publications.
3) Using examples from newspapers and magazines, ask learners to describe the target audience and how the print material appeals to that audience.
4) Share the responsibility of providing examples of propaganda in print. Discuss propaganda articles from newspapers or magazines by asking learners why those articles appeared in those publications. Who were the writers appealing to? Who was their target audience?
5) Together, apply what you know about propaganda in real-life situations and share your experiences with one another.
6) Remember that every skill is <u>not</u> emphasized in every lesson. The needs and goals of the learners and the content of the selection should guide the emphasis for each lesson.

Material:

Newspapers

Magazines

News for You

Challenger Series

Television

Video

Any material of interest to the learner

Example Activities

Critical Thinking: *Nonfiction*

Activity One

Material: *News for You* article on the "Environment"

Discuss: The term "environment." Share your experiences about environmental issues with one another.

Definition: Together, create a definition for the term "environment" and write it on a 3x5 index card. On the back of index card, create a sentence using the term "environment." Tell the learners to use the card for reference when reading articles about the environment.

Follow steps outlined on pages 1 and 2 of this document.

Together, create a map of the article which includes the pro and con statements about the Federal government's plan and the sources of the statements.

Share opinions about the Federal government's environmental plan. Base opinions on what is read and personal experiences.

Finally, assist learners to express their opinions about the Federal government's environmental plan by creating letters to be sent to representatives in government. With the learners' permission, send letters to the editors of local newspapers and to representatives in government who serve at the local, state, and/or national level.

Activity Two

NOTE: This activity is an introduction to the *National Issues Forum* (NIF) process used with literacy tutors and adult learners.

Material: *National Issues Forum* publication entitled, *Regaining the Competitive Edge*.

Discuss: Major sight vocabulary which appears in the NIF Teacher's Guide. Create definitions of new vocabulary words and write sentences using them.

The slower growth of the economy and how this phenomenon has affected them or members of their family.

How we can improve our productivity growth in this country.

Duet Reading: Read selection together. Ask learners to reread silently for deeper meaning, asking for assistance when they need it. Finally, complete the following steps in order.

Explore: Options/choices presented in the NIF publication by discussing the following questions. What are the options/choices? What are the assumptions made about the options/choices? What are the advantages if these options are chosen? What are the disadvantages if these options are chosen? What are your options? What are the advantages of your options/choices? What are the disadvantages of your options? What are the consequences/outcomes if your options/choices are used?

Map: The advantages and disadvantages of each option/choice.

Write: Letters to editors of the local newspapers describing your opinions on this issue. Letters to local congress people explaining your opinions about this topic. Include suggestions for solving the problem, if possible.

Discuss: How information about the topic can be used in everyday life.

Activity Three

Propaganda in Advertising

Discuss propaganda in advertising with the learners by asking them why it is important to know how advertisers try to attract an audience. Suggest that learners bring in examples of ads from print material, as well as from radio and television. Tell learners that we will identify the audience the advertiser is trying to attract, and how propaganda is used to attract that audience.

Material:

Ads found in print, radio and television

1) Show learners examples of propaganda from print, radio and television. Explore who the intended audience is and how propaganda is used to attract that audience.

2) Look for examples of propaganda on television, in the newspaper, and in magazines in order to share them with one another at the next tutoring session.

3) Identify the intended audience, and examine how propaganda is used to attract that audience.

4) Apply knowledge of propaganda in advertising when purchasing items in real life, and share your experiences with one another.

Activity Four

Propaganda in Print

Propaganda is found in newspapers, magazines and books, as well as on television and radio. We need to be aware that propaganda is part of our daily lives. In order to avoid awkward situations, we must be able to recognize propaganda when it is encountered.

1) Bring in articles which contain misleading information to share with learners.
2) Together, identify the propaganda used, as well as the intended audience. Discuss how propaganda influences the audience.
3) Together, find examples of propaganda in print, identify the audience, and explain how propaganda is used to attract the audience.
4) Discuss with learners how they will use knowledge of propaganda in everyday life. Tell learners that you are interested in hearing about their experiences with real-life propaganda. Tell learners that you will also share your experiences.

Section 25

Assessment

Slosson Oral Reading List

To Administer: Say: Read these words. Stop when 4 words in a row are missed.

list p ..... (20)	list 1 ..... (40)	list 2 ..... (60)	list 3 ..... (80)	list 4 ..... (100)
1 ..... see	1 ..... with	1 ..... game	1 ..... safe	1 ..... harness
2 ..... look	2 ..... friends	2 ..... hide	2 ..... against	2 ..... price
3 ..... mother	3 ..... came	3 ..... grass	3 ..... smash	3 ..... flakes
4 ..... little	4 ..... horse	4 ..... across	4 ..... reward	4 ..... silence
5 ..... here	5 ..... ride	5 ..... around	5 ..... evening	5 ..... develop
6 ..... can	6 ..... under	6 ..... breakfast	6 ..... stream	6 ..... promptly
7 ..... want	7 ..... was	7 ..... field	7 ..... empty	7 ..... serious
8 ..... come	8 ..... what	8 ..... large	8 ..... stone	8 ..... courage
9 ..... one	9 ..... bump	9 ..... better	9 ..... grove	9 ..... forehead
10 ..... baby	10 ..... live	10 ..... suddenly	10 ..... desire	10 ..... distant
11 ..... three	11 ..... very	11 ..... happen	11 ..... ocean	11 ..... anger
12 ..... run	12 ..... puppy	12 ..... farmer	12 ..... bench	12 ..... vacant
13 ..... jump	13 ..... dark	13 ..... river	13 ..... damp	13 ..... appearance
14 ..... down	14 ..... first	14 ..... lunch	14 ..... timid	14 ..... speechless
15 ..... is	15 ..... wish	15 ..... sheep	15 ..... perform	15 ..... region
16 ..... up	16 ..... basket	16 ..... hope	16 ..... destroy	16 ..... slumber
17 ..... make	17 ..... food	17 ..... forest	17 ..... delicious	17 ..... future
18 ..... ball	18 ..... road	18 ..... stars	18 ..... hunger	18 ..... claimed
19 ..... help	19 ..... hill	19 ..... heavy	19 ..... excuse	19 ..... common
20 ..... play	20 ..... along	20 ..... station	20 ..... understood	20 ..... dainty

list 5 ..... (120)	list 6 ..... (140)	list 7 ..... (160)	list 8 ..... (180)	High School ... (200)
1 ..... cushion	1 ..... installed	1 ..... administrator	1 ..... prairies	1 ..... traverse
2 ..... generally	2 ..... importance	2 ..... tremor	2 ..... evident	2 ..... affable
3 ..... extended	3 ..... medicine	3 ..... environment	3 ..... nucleus	3 ..... compressible
4 ..... custom	4 ..... rebellion	4 ..... counterfeit	4 ..... antique	4 ..... excruciating
5 ..... tailor	5 ..... infected	5 ..... crisis	5 ..... twilight	5 ... pandemonium
6 ..... haze	6 ..... responsible	6 ..... industrious	6 ... memorandum	6 ..... scrupulous
7 ..... gracious	7 ..... liquid	7 ..... approximate	7 ..... whimsical	7 ..... primordial
8 ..... dignity	8 ..... tremendous	8 ..... society	8 ..... proportional	8 ..... chastisement
9 ..... terrace	9 ..... customary	9 ..... architecture	9 ..... intangible	9 ..... sojourn
10 ..... applause	10 ..... malicious	10 ..... malignant	10 ..... formulated	10 ..... panorama
11 ..... jungle	11 ..... spectacular	11 ..... pensive	11 ..... articulate	11 ..... facsimile
12 ..... fragrant	12 ..... inventory	12 ..... standardize	12 ..... deprecate	12 ..... auspicious
13 ..... interfere	13 ..... yearning	13 ..... exhausted	13 ..... remarkable	13 ..... contraband
14 ..... marriage	14 ..... imaginary	14 .... reminiscence	14 ..... contrasting	14 ..... envisage
15 ..... profitable	15 .... consequently	15 ..... intricate	15 ..... irrevelance	15 ..... futility
16 ..... define	16 ..... excellence	16 ... contemporary	16 ..... supplement	16 ..... enamored
17 ..... obedient	17 ..... dungeon	17 ..... attentively	17 ..... inducement	17 ..... gustatory
18 ..... ambition	18 ..... detained	18 .. compassionate	18 ..... nonchalant	18 ..... decipher
19 ..... presence	19 ..... abundant	19 ..... complexion	19 ..... exuberant	19 ..... inadequacy
20 ..... merchant	20 .... compliments	20 ..... continuously	20 ..... grotesque	20 ... simultaneous

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Section 26

Goal Setting

Sample Skill List For Goal Setting

I. General Skills

A. write name, address, and telephone number
B. tell time
C. read a calendar
D. use a telephone book
E. read street and store signs
F. read or write a letter
G. read a newspaper
H. improve spelling skills
I. get a library card

II. Transportation

A. read bus or train schedules
B. read traffic signs
C. pass the test to get a driver's license
D. pass the test to get a commercial driver's license
E. read maps
F. do car maintenance

III. Money

A. use a checking account
B. write money orders
C. read a bank statement
D. read and pay bills
E. make a budget
F. apply for a credit card
G. obtain insurance
H. fill out public assistance forms
I. learn more about Social Security
J. make change

IV. Jobs

A. get a job
B. get a better job/promotion
C. read classified employment ads
D. fill out a job application

IV. Jobs *(continued)*

E. read job-related manuals/forms
F. write a resume
G. understand paychecks/deductions
H. interview for a job
I. open own business

V. Health

A. read directions on medicine bottles
B. read warning labels
C. know how to give first aid
D. write down medical and dental appointments
E. locate emergency numbers

VI. Food/Shelter

A. write a shopping list
B. learn about good nutrition
C. read recipes
D. read food labels
E. read grocery ads
F. use coupons/save money on grocery bills
G. read classified ads for apartments
H. read and understand leases
I. learn about landlord/tenant laws
J. buy/sell a house

VII. Children

A. read to children
B. help them with their homework
C. read school notices/reports
D. read about child care
E. write notes to the school
F. write medical history/record of shots

VIII. Government/Law

A. get U.S. citizenship
B. register to vote
C. vote
D. fill out tax forms
E. get a social security number
F. get legal advice
G. read legal forms

IX. Recreation

A. read a TV program schedule
B. read a menu
C. find out about community activities
D. learn a hobby
E. read an interesting book
F. read the movie schedule

X. Religion

A. read church bulletins
B. read the Bible or other religious materials
C. read a hymnbook

XI. Other

A. take GED Practice Test
B. pass GED Test
C. enter other educational or training program
D. learn English
E. be removed from public assistance (Welfare)
F. feel better about myself
G. _____

Goal Setting – Rationale & Procedure

The purpose of your tutoring sessions is to enable the adult to acquire the basic reading and writing skills she needs to meet her personal goals. Many of your decisions about which methods and materials to use will depend on knowing what these goals are.

Sometimes a student will need your assistance to help her define those goals. You can do this by encouraging her to discuss the following questions:

- What made you decide to come for reading help now?
- If you could read as well as you would like to right now, what would be the first thing that you'd want to read?
- What other things would you like to be able to read that you have difficulty reading now?
- What do you like to do when you have free time?
- What kinds of things do you do best?

As you talk, you may find that the student's goals are truly "long-range." A common example is the very beginning student who wants to get her high school equivalency diploma or a well-paid job.

Don't discourage a student who expresses goals like these. Instead, help her to see that there are many short-term goals that the two of you can work on that will help move her closer to her long-range goal. For example, the student who wants to get a good job might need to learn how to read a want ad or how to fill out a job application.

Each of these skills can in turn be subdivided into smaller activities. In order to read a want ad, a student needs to learn how to locate the employment ads in the classified section of the newspaper. She needs to learn alphabetical order and whatever other system the paper uses to categorize jobs. And she has to be able to understand any special vocabulary or abbreviations that are used in these ads.

Work with the student to list the activities you want to work on together. Then ask her to select those activities which she would like to work on first. Involve her in making decisions about what you will do with your time together. But be sure that the choices are realistic, and don't promise more than you can deliver. Remember: the more concrete the activities, the easier it will be for the student to judge how much progress she is making.

If the student has difficulty identifying goals or describing what she'd like to use her reading for, you might mention some of the categories listed on pages 3 and 4 of this section. If she seems interested in one of them, read her some of the activities listed under that category. Help her select one or two that you might work on together.

After you have identified some short-term, concrete, and realistic goals, make sure you set aside some time in each tutoring session to work on them. Remind the student too that the time she spends studying in the *Laubach Way to Reading* series will also help her make progress toward her goal. She is developing a foundation of basic skills that will be used in all of the activities you have talked about. (However, be sure that completion of a particular skill book level does not become the primary goal of your lessons.)

And finally, take the time to periodically discuss and evaluate with the student what progress she is making. You might decide to modify your short-term goals or set new ones. But make that decision together.

On page 2 of this section is an example of what Ellen and her tutor came up with when they worked through this process. The student is a young mother with two children (ages 3 and 5). She dropped out of school in the ninth grade and now works evenings as an aide in a local nursing home. Although she has some sight vocabulary, she is a poor reader.

Long-Range Goal: To help my children learn to read

Short-term goal #1: Spend 10 minutes a day reading to them

Activities	Methods/Materials
1. Get a library card	application form - orientation to library
2. Learn to read a	duet reading - tutor-made
simple children's book	read-along tape to practice with
3. Learn 10 new words	flash cards
from the book	

Short-term goal #1: Make an alphabet picture book

Activities	Methods/Materials
1. Select pictures together	catalogs - magazines
2. Set up album with one	photo album - marking pen
letter on each page	chart showing alphabet
3. paste in pictures	
according to initial letter	
4. Label the pictures	
5. Learn the words	flash cards
without the pictures	

Source: Laubach Literacy Action. *The Laubach Way to Reading Tutor Workshop Handbook*. Syracuse, New York: New Readers Press. 1989.